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BUREAU OF EDUCATION

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AN EDUCATIONAL STUDY OF
ALABAMA



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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,

Washington, June 17, 1919.

SIR: I am submitting herewith the report of a survey of public education in the State of Alabama, including all schools that receive any part of their support from the treasury of the State.

The survey was made under my direction, at the request of the Alabama Survey Commission, created by act of legislature as set forth in the introduction to this report. On June 9, 10, and 11 the report was submitted by me to the Survey Commission, through Dr. Harold W. Focht and Dr. Samuel P. Capen, specialists in rural education and higher education, respectively, in this Bureau, and was approved and received by the commission.

I recommend that the report be published as a bulletin of the Bureau of Education for distribution among the citizens of Alabama and students of education throughout the country.

Respectfully submitted.

P. P. CLAXTON,
Commissioner.

THE SECRETARY OF THE INTERIOR.

AN EDUCATIONAL STUDY OF ALABAMA.

INTRODUCTION.

An act of the Legislature of the State of Alabama, containing the following provisions, was approved by the governor February 6, 1919:

1. That the governor shall appoint a commission of five persons * * * to make a study of the public educational system of Alabama, including all schools and educational institutions supported in whole or in part from public funds, to determine the efficiency of the same and to report its findings, with recommendations for increased efficiency and economy, to the governor on or before July 1, 1919.
2. That the said commission is empowered to employ expert assistants in the several fields of public education in which the State is engaged. * * *
3. That the said commission and its employees shall have free access to all public records. All public school and educational institutions, teachers, instructors, faculties, officers, and employees shall furnish all information and assistance in their power in making such a study as is contemplated under this act. * * *
4. That said commission shall, in addition to other work specified by this act, direct special attention to the feasibility and the advisability of consolidating any of the existing State educational institutions or departments thereof, of eliminating any institution or institutions, and of coordinating and unifying the work of any or all institutions under one board of management and control.
5. That there is hereby appropriated, out of any money in the treasury not otherwise appropriated, the sum of \$10,000 * * * for the purpose of defraying the cost of the study herein proposed.

On the 11th of March, 1919, the Alabama Education Commission created by this act met in the capitol at Montgomery to outline the work of the survey and to listen to comments on the plan by Dr. Wallace G. Buttrick, of the General Education Board, and to Dr. Philander P. Claxton, United States Commissioner of Education.

The commission passed the following resolutions:

Whereas the Educational Commission has been created in accordance with an act of the legislature approved February 6, 1919; and

Whereas this commission must submit its report to the governor on or before July 1, 1919; and

Whereas the scope of the work prescribed in said act comprehends the entire public-school system of Alabama; and

Whereas the discharge of this duty will necessitate the collection and tabulation of certain technical and scientific information by experts; and

Whereas the United States Bureau of Education is the legally constituted head of the public-school system in this country: Therefore, be it

Resolved, 1. That the United States Bureau of Education is hereby invited and requested to accept the task of making the scientific study of the entire public-school system of Alabama, upon the terms and in keeping with the plan outlined by Dr. P. P. Claxton, United States Commissioner of Education.

2. That so much of a sum of \$8,500 as may be necessary be set aside from the State appropriation of \$10,000 to pay the expenses of those working under the direction of Commissioner Claxton for the provision of clerical help and supplies and honoraria to three or four men outside of the staff of the Bureau who are also to be asked to serve in an advisory capacity.

3. That the Commissioner of Education and those working under his direction be clothed with all the authority conferred under Section III of the act to secure information that may be deemed necessary to make a full and complete survey of public education in Alabama, and to this end to require the production of papers, records, and information under oath from any person or persons engaged in public school work.

4. That the Commissioner of Education and his staff report the results of said investigation and findings to the commission by June 6.

In accordance with these resolutions the Commissioner of Education began the work of the survey March 12. The actual field work continued from that date until the 31st of May. Because of the very brief time available for the study, an unusually large number of persons were engaged in it. Their names and their respective contributions to the report appear in the following paragraphs.

The interrelations of the higher institutions were judged to present certain complications. On this ground it seemed advisable to associate with the Bureau's regular staff for the investigation of these institutions an advisory committee made up of representatives of various phases of higher education. The members of this committee were President E. A. Alderman, of the University of Virginia; Dr. C. R. Mann, chairman of the advisory board of the committee on education and special training of the War Department; President A. F. Woods, of the Maryland State College; and Dr. Horace D. Arnold, formerly dean of the graduate school of medicine of Harvard University, who was called in as a special adviser in regard to medical education.

Dr. H. W. Foght had general charge of the field work and the preparation of the manuscript, except the sections relating to higher education. Dr. Samuel P. Capen had charge of the investigation of the higher institutions and the preparation of this section of the report.

The field studies were organized under several group headings, and each study in charge of the survey personnel enumerated below:

1. *General School Organization and Administration*.—Dr. H. W. Foght.

2. *History of Education in Alabama*.—Mr. William R. Hood, division of school legislation, Bureau of Education.

3. *Rural and Agricultural Education*.—Mrs. Katherine M. Cook, specialist in rural education, Bureau of Education; Walter S. Deffenbaugh, specialist in education in villages and towns, Bureau of Education; Mr. C. H. Lane, regional director, the Federal Board for Vocational Education, and Dr. H. W. Foght.
4. *City Schools*.—Mr. P. W. Horn, superintendent of schools, Houston, Tex.; Dr. Frank F. Bunker, specialist in city school systems, Bureau of Education; and Dr. J. J. Didcott, professor of secondary education, George Peabody College for Teachers.
5. *Higher Education*.—Dr. Samuel P. Capen; Dr. Chester D. Jarvis, specialist in agricultural education, Bureau of Education; Dr. Walter C. John, specialist in land-grant college statistics, Bureau of Education; and Mr. J. J. Pettijohn, director of the extension division, Bureau of Education.
6. *Preparation of Teachers*.—Dr. Willis E. Johnson, president Northern Normal and Industrial College, Aberdeen, S. Dak.; Dr. H. W. Foght; and Dr. Samuel P. Capen.
7. *Special Education*:
 - Negro Education.—Mr. Walter B. Hill, special collaborator, Bureau of Education; Dr. Thomas Jesse Jones, special collaborator, Bureau of Education; and Mr. Jackson Davis, general field agent, General Education Board.
 - School Health and Physical Education.—Dr. Hiram Byrd, the United States Public Health Service; Dr. Willard S. Small, specialist in school hygiene and sanitation, Bureau of Education; and Miss Martha Stevens, director of health education.
 - Home Economics.—Miss Carrie A. Lyford, specialist in home economics, Bureau of Education.
 - Home and School Gardening.—Mr. John L. Randall, regional director, United States School Garden Army.
 - Education of Delinquents, Defectives, and Illiterates.—Dr. H. W. Foght.

The recommendations relating to higher education were submitted to the members of the advisory committee on June 2, and Messrs. Mann and Woods concurred in all. President Alderman dissented from Recommendations 15 c-4, 15 j, 15 k, 15 n, and 15 o-1.

On June 7 the chapters dealing with higher education were presented to the presidents of the University of Alabama and the Alabama Girls' Technical Institute, in Montgomery. On the 8th and 9th of June these same chapters were presented to the president of the Alabama Polytechnic Institute, in Montgomery. The purpose of these conferences was to correct any possible misstatements

of fact. As a result of them a few minor changes were made in the phraseology of the report and one recommendation was changed.

On June 9, 10, and 11 Messrs. Foght and Capen presented the report of the survey committee to the Alabama Education Commission, at Montgomery.

The staff of the Bureau of Education and its associated investigators gratefully acknowledge their obligation to the members of the Alabama Education Commission for their many courtesies and hearty cooperation throughout the study; to the State department of education for valuable help in procuring and compiling educational statistics; to the director of the department of archives and history for valuable documentary information; and to the heads of the State's educational institutions, the county and city superintendents, and the teachers of the State for valuable advice and constant cooperation.

Chapter I.

ALABAMA, THE LAND AND THE PEOPLE.

Main topographical features.—Alabama is situated in the east South Central Division of States, in the heart of the "cotton kingdom." It contains an area of 51,279 square miles, 711 square miles of this being water. The State falls naturally into two great topographical divisions—the Appalachian area and the coastal plain, the dividing line between the two running roughly from the north-western part of the State through Tuscaloosa to Montgomery, thence swinging in a bold curve toward a point near Columbus, Ga. The mean elevation above sea level is about 600 feet. To the north and east of this line the surface rises gradually to 1,800 feet, with occasional heights of 2,400 feet in the Talladega Mountains. To the south of the dividing line, the surface falls gradually toward the south and west till the tidal plain is reached. The main axis and watershed of the Appalachian area runs through Coosa, Clay, and Cleburne Counties. East of this lies the Talladega Mountains, a rugged mountain ridge east of which lies the Ashland Plateau with an altitude of nearly 1,000 feet. To the west and north of the mountain axis lies the fertile Tennessee Valley, fringed on the south by a great mountain "rim," rich in coal and iron and limestone.

The Tennessee Valley, or more correctly speaking, Tennessee Plateau, is traversed the whole width of the State by the Tennessee River. This is the blue-grass section of Alabama. Its soil is in the main a deep red clay, well-drained and easy of culture. This section of the State is well suited to the production of the staple grains and live stock. The Tennessee River offers great possibilities for development of water power, the most noted natural reservoir being located at Muscle Shoals. South of this river plateau rises a low ridge of mountains known popularly as the "rim," underlaid with rich deposits of iron, coal, limestone, and marble. The great Birmingham industrial district forms the heart of this section.

The Alabama black belt, so called because of its rich black muck soil, embraces a great rolling prairie southward of the Appalachian area and extending to the coastal plain. Its soil is remarkably fertile, despite the fact that it has been "cottoned" for upward of a hundred years, under the indifferent plantation system that is now be-

ginning to pass away. By degrees farming in the black belt is becoming diversified; live stock and alfalfa have already transformed some parts of it, and soon the entire belt should become one of the greatest stock-growing and dairying sections of the South.

The gulf coastal plain embraces the entire southern portion of the State south of the prairie black belt. Its topography varies from level to gently rolling lands, watered by small streams, which in the main afford a good drainage system. The soil is largely a sandy loam particularly well adapted for truck farming and fruit growing. In places this region contains pine and oak uplands, with here and there, toward the coast, pine barrens, much of which is yet largely undeveloped.

Early spread of population influenced by this topography.—In addition to the bold curving Tennessee in the north, the State is traversed by the great Alabama-Tombigbee River system, navigable for many miles northward from Mobile Bay. Of the tributary rivers the Coosa drains the rich Coosa Valley, noted for its agricultural wealth and famous also for its unlimited water power. The Warrior is also noted for its great possibilities in water power and for its wealth in agricultural lands. These rivers have all played a great part in the development of the State. In the early historic days the population moved northward from Mobile, following the deep-water courses. Others came southward from Kentucky and Tennessee, down the river of this name, where they passed by land over the rim to the Warrior and Tombigbee, down which they gradually spread. Other pioneers from North Carolina, South Carolina, and Georgia advanced down the Coosa River into the heart of the State. Meanwhile there was a gradual inflow of Georgians along the entire eastern border of the State.

Climate of the State.—The climate of Alabama is regulated largely by such controlling factors as elevation above sea level, geographical trend of the highlands, and the proximity to the Gulf of Mexico. Fortunately for the State, these have combined to give Alabama a comparatively uniform climate, with no great extremes in the temperature. It is true the summers are long, but they are seldom oppressive. The nights are fairly cool. The average temperature for the State is 68 degrees Fahrenheit, with 61 degrees in the north and 65 degrees in the south. The average summer maximum temperature is 90 degrees, while the average winter minimum is 35 degrees.

The annual average precipitation is 51 inches; the region of least precipitation is near the center of the State, where it is 48 inches. The greatest is along the coast, where in places it reaches as high as 63 inches. The coast line is visited by occasional destructive sub-tropical storms, while the central section of the State is liable to drouthy conditions, most likely to occur between May and November.

Occupations of the people.—Alabama is preeminently an agricultural State, notwithstanding the fact that it contains a rapidly growing industrial section, centering about Birmingham. It ranked eighteenth among the 48 States as regards population both in 1910 and 1900. In 1910 the density of population for the entire State was 41.7 per square mile, the corresponding figure for 1900 being 35.7. The population is mostly rural. In 1910, of the entire population, 17.3 per cent resided in incorporated cities and towns with a population of 2,500 and over; in 1900 only 11.3 per cent.

Birmingham is the one great industrial city of the State; Mobile and Montgomery are the only other cities having above 25,000 population. Anniston, Bessemer, Gadsden, and Selma are other cities having more than 10,000 population in 1910; since that time Tuscaloosa has likewise reached this population. These cities contain about 14 of the total 17.3 per cent urban population in the State.

The census of 1910 places the whole number of farm operators at 262,901 persons. This includes owners operating farms, as well as tenants and renters. Persons engaged in manufacturing come second, with 81,972 persons. This group includes both salaried officials and wage-earners. Mining of coal and iron and quarrying of limestone and marble engage about 32,000 persons.

The agricultural system.—The land surface of Alabama is 32,818,568 acres. Of this area 21,732,312 acres are rated as tillable. But of this amount not more than 9,000,000 acres have been cleared, and of this area again only about 8,000,000 acres have been kept open for cultivation. Indeed, fully 62 per cent of the State's tillable lands are not now under the plow, and of the acreage that is utilized much needs draining and terracing before it can be farmed effectively. The State has not yet emerged fully from the old "land economy" period of agriculture, which in the South was marked by the old plantation system of owners, overseers, and slave land tillers. Since the reconstruction period the system has suffered largely from absentee landlordism and tenant farming. The large plantations are gradually, however, being reduced in size and the number of operators is increasing accordingly. In 1910 there were 262,901 operators of all kinds; of these, 108,929 were classed as owners, 646 as managers, and 158,326, or 60.2 per cent of all, as tenants, known variously as share tenants, share-cash tenants, and cash tenants.

The old system of farming has proved economically unsound. The colored tenants have made no headway. In ordinary years they are "carried" by the landowner, the overseer, or local merchants until the crops are made. If the crops are good both owner and tenant have a fair margin. But in exceptional times—such as the last five or six years—the system has been breaking down. The

low cotton prices in 1913-14 made the beginning of the break; it was aided by the boll-weevil plague and the destructive flood in 1916. This seeming calamity was probably the most fortunate thing that could have happened. Because of it the one-crop system is now yielding to diversified farming. Cotton culture has been reduced to 55 per cent of what it was four years ago. This reduction has been more than made up in value by increasing crops of corn, alfalfa, hay, velvet beans, peanuts, and raising better live stock. Because of shortage in labor many plantations are being turned into dairy or stock farms; alfalfa and cowpeas are produced in increasing acreage to provide fodder and to supply humus and nitrogen for the land. Pure-bred stock, both dairying and beef types, have been introduced from the North. This has revolutionized the live-stock industry and has actually doubled the number of cattle in the State in three years' time. An era of scientific agriculture is apparently about to take its beginning in the State.

Growth in manufacturing industries.—No State is more fortunately situated in regard to urban industries than is Alabama. The Birmingham district is rich in bituminous coal and iron ore; and the limestone necessary for fluxing the iron is abundant in the same region. The Coosa-Alabama River system affords unlimited power possibilities, and the raw cotton is produced within easy reach of the cotton mills. In 1879 only 10,000 wage earners were employed in manufactures in the State; by 1910 this group of workers had reached about 83,000. The total value of manufactured products increased during this time from \$13,566,000 to \$145,962,000, or more than tenfold. The growth in manufacturing has been so tremendous as almost to overshadow for the time being, in the minds of many, what must always continue to hold the first place in the State's activities—i. e., agriculture.

Population: Its increase and distribution.—In 1910 the total population of the State was 2,138,093. In 1917 it is estimated at 2,363,989. There has been a steady increase since the first census was taken in 1820. From 1900 to 1910 the increase was 16.9 per cent. In density the population varies greatly. The population of the counties varies from 12,855 in Winston County to 226,476 in Jefferson County, the latter embracing the industrial center of Birmingham, which alone contributes 6.2 per cent of the total population of the State. Alabama has 36 cities, as defined by the United States Census Bureau, and 46 cities according to the State definition, which counts as cities all incorporated places of 2,000 population and upward.

In common with most States, Alabama has shown a gradual decline in the percentage growth in rural population as compared with the growth in urban population. In 1890 the former represented 89.9 per cent of the total, and in 1900, 88.1 per cent, with the still

greater decline, 82.7 per cent in 1910. However, on the basis of aggregate growth, the rural population increased during the decade 1900-1910 by 406,496 people, while the cities added only 218,196.

Racial composition and characteristics of the population.—Alabama offers no great social or economic problem so far as the white race is concerned. Of the white population now in the State, 84.1 per cent were born there. The others have come, in the main, from Georgia, Tennessee, Mississippi, and other South Central and South Atlantic States. In 1910 there were only 51,373 persons of foreign birth in the State. This solidarity and lack of influx in population has to a degree deprived the State of the advantages that accrue from a wholesale mingling of population from section to section. The native white population is made up chiefly of descendants of the early-colonials of good Anglo-Saxon, Scotch, Irish, and Huguenot ancestry.

The colored race.—In 1910, of the whole population, 908,282 persons, or 42½ per cent, were negroes. It constitutes 75 per cent or over in 11 counties in the so-called black belt, while in 10 of the mountain counties the percentage of negro population is negligible.

Like other Southern States, Alabama has the problem of two races. The negroes form a vital part of southern life, and have both aided and hindered its development. They are largely a landless population, largely improvident, and poor, so that the slightest economic pressure is likely to set in motion a negro movement of some dimensions.

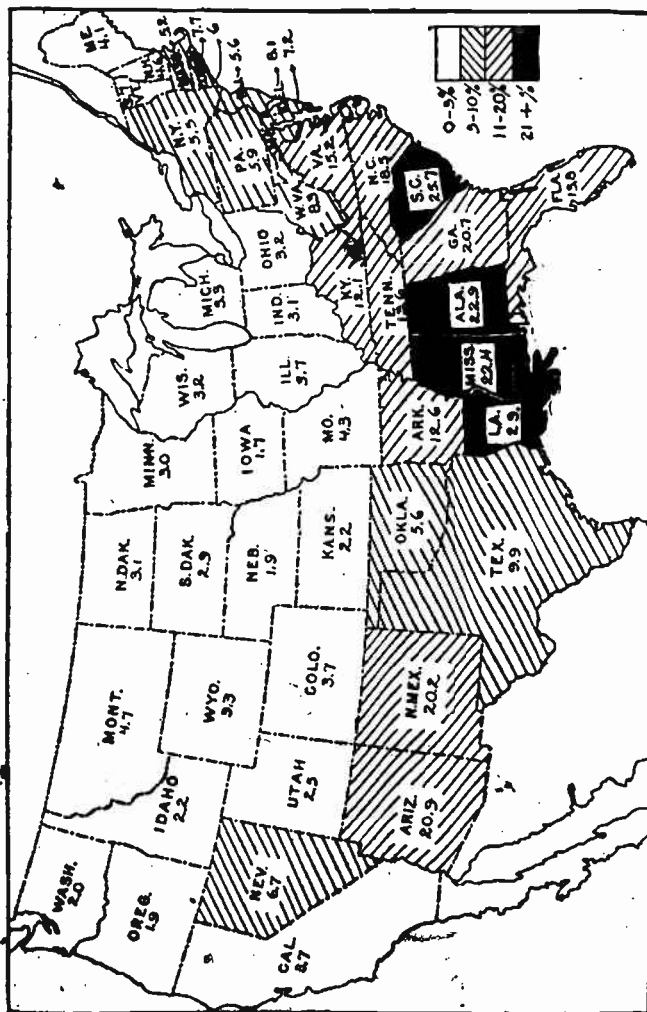
Such a movement has been going on since 1916. The boll weevil and the great floods of that year had impoverished the colored population and made them eager to respond to the great labor call from the North due to the war. During the summer of 1916 the negroes began leaving the State in such numbers as to constitute a real migration. By the middle of 1917, according to the best estimates, 75,000 persons, or 8.3 per cent of the total negro population, had abandoned the State. Since that time the movement has slackened, but it has by no means yet come to an end.

The heaviest losses have naturally been in black-belt territory. Of the 11 black-belt counties which in 1910 had a negro population amounting to 75 per cent or more of the total population, "eight form a section extending from Montgomery County westward to the State of Mississippi. These are Dallas, Green, Hale, Lowndes, Marengo, Perry, Sumter, and Wilcox. The remaining three, Bullock, Macon, and Russell, connect Montgomery County with the State of Georgia to the east. It is from these counties that negroes have gone literally by the thousands. Some of the counties have lost 25 per cent or more of their total negro population within the past 18 months."

* Negro Migration in 1916-17, U. S. Department of Labor, Bulletin, 1919, p. 56.

While the immediate causes of the migration were economic, much of it can also be explained in a desire for social betterment, and particularly for improved educational advantages.

Prevalence of illiteracy.—In 1910 Alabama ranked forty-sixth in the United States in adult illiteracy. Two States only—South Caro-



TOTAL ILLITERACY, 1910

This map contains the per cent of adult illiteracy—persons above 10 years of age—on the basis of total population, according to the census of 1910.

lina and Louisiana—ranked lower. The accompanying map shows that 22.9 per cent of the entire population above 10 years of age were classed as illiterates. By far the larger per cent of these illiterates are colored, it is true; but the percentage is alarmingly large among the white population also.

At the present time (biennial school census, 1918) there are in the State an aggregate of 334,559 white children between the ages of 10 and 20, inclusive. Of this number, 311,108 were returned by the census as literate and 23,451 as illiterate. Similar ages for 1914 gave an aggregate of 306,857, of which number 280,598 were classed as literate and 26,259 as illiterate. That is to say, one white child in every 14 in 1918 approximately three years above compulsory attendance age had not yet learned to read and write; for 1914 the ratio was even worse, being one in every 12.

Conditions among the colored children are much worse. In 1918 there were 226,732 colored children from the ages of 10 to 20, inclusive. Of these, 161,986 were classed as literate and 64,746 as illiterate; corresponding ages for 1914 gave an aggregate of 240,814 colored children, of whom 170,567 were classed as literate and 70,246 as illiterate. In other words, one out of every three colored children in 1914 who should have been in school for upward of three years could neither read nor write. In 1918 the ratio was still one to three.

These figures consider only the children of school age, and bear direct witness that the public-school facilities of the State are quite inadequate and the compulsory law only poorly enforced. It proves also that the State must invest much more in education than it has done, and must equalize the investment better between the races than it has done, if this unfortunate condition is to be remedied in the near future.

In the population beyond school age the illiterates are by no means limited to the older people who are beginning to pass away; it is quite prevalent among the very youth who have the destiny of the future in their hands. This is evidenced by the astonishing disclosures in the registration under the recent selective draft. Alabama had approximately 10,000 young men of draft age wholly illiterate in a total registration of 172,727, or one in each 17 persons.

How the wealth of the State is utilized for education.—Alabama is potentially a rich State. The actual accumulated wealth is, however, not so great as might be expected. Nor is this wealth well distributed. The mass of the Negro population is poor and landless and of little tax ability. Great wealth is exceptional and of recent origin, and is limited in the main to the industrial regions. The large planters have been kept "land poor" by the indifferent system of one-crop farming, but in spite of this some of them have become wealthy by holding their lands for the unearned increment. On the other hand, it must not be assumed that Alabama is unable to support well a modern system of public schools. The State has not in past years utilized its resources so fully or so effectively as it should have done, all of which is shown clearly in following chapters of this report. The State has the ability to do vastly more than it has done.

The crux of the whole matter is how to readjust the State's unsatisfactory tax system; how to equalize taxes among the rich and poor; and how to enforce the revenue code fairly over the State?

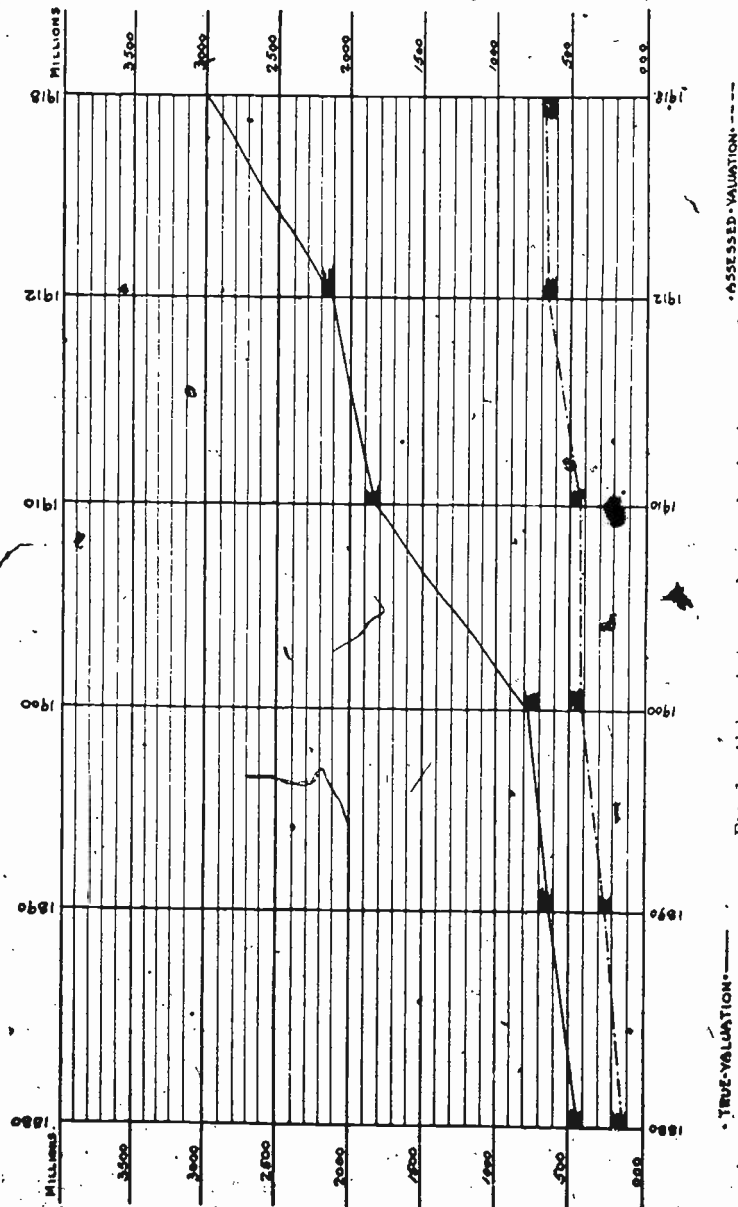


FIG. 1.—Alabama's true and assessed valuation.

Figure 1 shows graphically the increase in the State's actual property valuation and its assessed valuation. A glance at the figure indicates that the total resources have increased satisfactorily for

several decades, and especially so since 1910. It is, in fact, rapidly outstripping the growth in population. But the *assessed valuation has not increased in the same proportion.* At no time since 1880 has the assessed valuation reached the required "60 per cent of its fair and reasonable cash value," and *at the present time (1919) it is scarcely more than one-third of the legal requirement.* (See Chapter XXIV.)

The average wealth per inhabitant in the State is \$1,250, on a fair basis valuation. On this basis the total resources available for each child in the State 5 to 18 years of age (the normal attendance age), would be about \$4,000 as against \$894 per child on the present assessed valuation. This means that if the property were assessed at 60 per cent of its real value the present tax rates would produce more than \$24 for the education of each child (5 to 18 years) instead of the present amount of less than \$7.

That Alabama has the ability to invest much more in education than it has done in the past goes unchallenged. The State went over the top gloriously in all its war finance activities, subscribing more than \$30,000,000 alone for the fourth Liberty loan. Alabama has paid Federal taxes in increasing volume, from \$463,000 in 1914 to \$19,132,000 in 1918, with an estimated tax of \$30,000,000 for 1919. It is reasonable to assume that when the people of Alabama begin to realize the seriousness of the prevailing conditions in their schools, because of the present inadequate financial support, they will "go over the top" as cheerfully in their efforts to make democracy safe through the best type of education as they did when the foundations of this democracy were threatened by a foreign enemy.

CHAPTER II.

FUNDAMENTAL EDUCATIONAL NEEDS AS INDICATED BY CHARACTER AND RESOURCES OF ALABAMA.

Any effective system of education must take hold on the life of the people for whom it is designed, and must be such as to make them intelligent about the life they live, the work they do, the social and political units of which they are a part, the forces and laws of the universe with which they constantly deal and on an understanding of which their welfare and life may depend. The educational system of a democracy must insure to all full, free, and equal opportunity for that kind and degree of education that will develop most completely the native ability of each and the highest degree of manhood of all, with the fullest possible measure of the sweetness and light which we call culture. It must prepare for life, for making a living by some form of useful, intelligent, and skillful work, and for the duties and responsibilities of citizenship. It should include body, mind, and soul. Its aim should be individual happiness and social welfare. Its justification is the service of intelligence and good will which results in material wealth, social purity, civic righteousness, and political stability and power. For its support, therefore, it has first and indisputable claim on all the resources of the State and all the wealth of the people. The principles involved in such education are universal, but their application is dependent on local environment and historical conditions.

Being an organism and not an artificial creation out of hand, a system of education can be improved by wise and thoughtful development rather than by destructive criticism and rash attempts toward radical revolution. Yet it must be quick to respond to the new and changing needs of the people it serves, and those who direct its development must be keen both to understand the present and discern the needs of the future. In making the recommendations included in this report it is assumed that these principles are understood by the people of Alabama and their representatives in State, city, and county councils.

In abundance and variety of natural resources and in possibilities of material wealth, Alabama ranks very high. Some day the State will be the home of many millions of people, rich and progressive

beyond all present compare. In area Alabama is as large as England, with her population of thirty-five millions. Its soil and climate are adapted to a very wide range of profitable agriculture, including all or most of the staple crops of the United States—cotton, corn, wheat, rye, oats, grasses, clovers, beans and other legumes, white and sweet potatoes, sorghum and sugar cane, and all the fruits, nuts, berries, and vegetables common to temperate and semitropical climates. Wind currents and rainfall are such that excessive floods and droughts, and consequent destruction and failures of crops, are impossible. The forest wealth is great, and, under proper care, constantly and rapidly renews itself. According to the present estimates of the United States Geological Survey there are in the coal measures of the State seventy billion tons of coal—enough to supply the world at its present rate of consumption for a hundred years—and a billion and a half tons of iron ore of high grade. Last year the State supplied two-thirds of the graphite produced in the United States and its possessions. Marble, limestone, clays, and other building materials are found in quantities sufficient to furnish the home supply for all time and for export to neighboring States. The water power, when fully developed, with a possible thousands of millions of horse-power hours, will be sufficient to supply the needs of industries employing millions of workers. Stretching north and south from the rim of the middle Tennessee basin to the Gulf, halfway between the Atlantic Ocean and the Mississippi River, Alabama lies athwart the path of all the roads from the northeast to the southwest and the northwest to the southeast, and is therefore assured of easy access to markets in every direction. Fifteen hundred miles of navigable rivers and a great harbor looking out over the Gulf toward Mexico, the West Indies, South America, and the Panama Canal will, when fully developed, give her cheap transportation and easy access to the markets of the world. The industrial possibilities of the State are indicated by the fact that coking coal, soft iron ore, and lime for flux are found in the same hills, these hills being clothed with forests of valuable timber, and that, as nowhere else in the world, the cotton mill and the steel mill stand side by side in the same industrial town, and both obtain all their raw materials from the country immediately surrounding them.

A rich and rare array of material resources is this, but capable of full development and use only by an equally wide range of intelligence, scientific knowledge, and technical skill. Through the very nature of her resources, Alabama calls aloud for a well-devised, liberal, and well-supported system of practical and vocational education for the great masses of her people, both white and colored. Nowhere will such education yield a richer material reward or the want of it bring more disastrous results.

Education for agriculture and rural life.—Agriculture has been, is, and no doubt will long remain the occupation and source of support and wealth for a very large part of the people of Alabama. Were the State a one-crop State, limited in possibilities by soil and climatic conditions to a very few crops closely related in nature and in methods of cultivation and harvesting, but growing abundantly in a virgin soil not needing drainage to make it productive or care and skill to save it from erosion and depletion, Alabama's problems of agriculture would be fewer and simpler than they are. Effective methods of cultivation might then be acquired principally by tradition, and this part of the life of the State would depend somewhat less on the work of the schools than it now does. The same would be true if farming were carried on under a feudal system, or under conditions that would permit a few intelligent and well-trained men to direct the work of the many, who would then need only to follow faithfully the directions given by their leaders. But the conditions are, as already shown, far different, and the folly of attempting to carry on the State's chief industry without educational preparation for it has been sufficiently demonstrated.

With all its rich possibilities Alabama is still in practice, especially in its most fertile sections, largely a one-crop State. In a section in which every acre might with proper drainage be made productive, on which the most modern labor-saving machinery might be used without obstacles of stones or hillsides, which would produce abundant harvests of corn and small grains, clovers, grasses, beans, peanuts, and potatoes, and which has been shown to be well adapted to profitable live-stock growing, white and colored farmers, land owners and tenants, cultivate only a small fraction of the land, for the most part with the simplest implements and tools, with little or no use of modern labor-saving machinery or of steam, gasoline, or electric power, growing a crop the amount of which is strictly limited to the possibilities of the use of the hoe in an essential part of its cultivation and the sole use of the fingers of the human hand in its harvesting. Since no part of this crop can be used for either food, clothing, or shelter, or for any other purpose until it has undergone a long process of manufacture requiring complex machinery and large investments of capital, and since no other crops are grown in sufficient quantity to supply these needs, it must all be sold by the farmers for whatever price is offered at the time they must sell. Any crop so produced and so marketed must, except under abnormal conditions, be sold at a price only sufficient to insure a continuance of its production. Those who buy and sell and manufacture it make all the profits, and those who grow it and sell it in its raw state will pay to others the profits on all the things they buy for their meager support.

So agricultural Alabama has not grown rich and can not until conditions are changed radically. Only 1 acre in 4 being cultivated and productive, the hard-earned profits of this fourth acre must carry the burden of taxation not only for itself, but for the 3 non-productive acres also, unless the taxes on the fourth acre are reduced to an amount no larger than the 1 productive acre should pay. So the State as a whole does not grow rich from its agricultural lands, nor can it ever do so until its agricultural people, white and colored, are so instructed and trained that they can and will, under their own initiative and direction, as American farmers must, make better and fuller use of the great and varied agricultural possibilities.

All this means that the State of Alabama must, at whatever cost may be necessary, at the peril of falling relatively further behind in agriculture than it now is, establish and maintain schools for all its rural people, not only through the primary grades but at least through the years of the junior high school and for as many as possible—the more the better—through the senior high school also. The courses of study in these schools must be given a rich agricultural content, growing out of the life and work of the people and turning back into these a large amount of scientific knowledge and practical skill.

The teachers of these schools must be educated and trained for the work of instruction in the subjects of agriculture and rural home making and for wise and effective leadership in the rural communities in which they teach, and they must be paid such wages as will induce the best of them to remain until and after they have gained the professional knowledge, skill, and power that come only from successful experience. Schools must be so consolidated and so equipped as will enable teachers and pupils to do their best work. A healthy public sentiment and well-administered attendance laws must insure the regular and prompt attendance of the children of school age, and no parent or guardian, however ignorant, careless, or avaricious, must be permitted to rob any child of the opportunity which the State provides for its education and to cheat the State out of the profits which would come to it from the full and right education of the child. Junior and senior high schools in open country, villages, and towns must teach the possibilities of agriculture in Alabama by experimental and demonstration plats and farms and through well-directed home projects. Special agricultural schools with adequate support must offer at lowest possible cost for board and lodging practical instruction in agriculture and home making for those boys and girls who have passed the high-school age without acquiring the general education necessary to enable them to enter the ordinary high school, or who for other reasons can profit more by attendance at these agricultural schools than by attendance at other schools. The

College of Agriculture of the Polytechnic Institute should so increase its equipment for teaching agriculture and so diversify this work that it may be able to educate and train large numbers of leaders and directors in all kinds and phases of agriculture which may be profitably developed within the State—men of knowledge, skill, and vision to see and to understand, to promote and to develop. This school must also train women for equal leadership in developing and improving the home life of the State and in the economic use of that which the State produces or imports for the home.

Industrial education.—The products of the field, of the forests, and the mines of the State may continue to be sold at low prices as raw material or in a low state of manufacture in which the cost of material is the principal element, and labor and skill and taste only minor elements; or they may be changed into products in which skill, labor, inventive ingenuity, and cultivated, productive taste count for much more than raw material and multiply original values many times. Whether the one or the other thing shall take place will depend not so much on capital, which is mobile and which flows readily to those places where abundant raw material and skill and energy exist, and which with a little help is quickly created by these, but rather on the education which the State shall provide for its people in its cities and industrial centers. There is abundant proof that skill and desire and energy and understanding, all the result of education, will attract to the place where they are found both capital and raw material, enhancing the value of both.

Abundance and variety of raw material and of the sources of power, mildness of climate, and cheapness of living all mark Alabama, and especially the part of it above the line of falls, as the proper home of large and varied industries in textiles, woods, and metals; but these are as yet hardly more developed than is the agriculture of the State, and for the same reason. For industrial knowledge and skill the State has relied almost wholly on the outside world and has been content with furnishing its share in unskilled labor at the low price of unskilled labor when there has been a demand for it, and only to the extent of the demand created by those educated and trained elsewhere. As a result the industries of the State have not benefited its own people as they might have done.

The remedy is industrial and technical education in elementary and high schools—all-day schools, part-time schools, and evening schools—in all the actual and potential industrial communities of the State, and in the fuller development of courses in all phases of engineering in the State University and Polytechnic Institute. The large industrial cities must sooner or later establish and maintain technical schools of secondary and higher grade. For the present

the courses of study in the city schools need to be enriched with a larger content of the sciences of chemistry and physics and their practical applications in the shop and mill. Courses in designing for textiles, wood, leather, brass, iron, steel, and stone should be provided. All junior and senior high schools should be equipped with laboratories and shops. Courses of study should be lengthened to the full 12 years, common in the cities of most of the States, to give time for the new and additional work thus required.

In the cities and industrial centers, as in the country, standards of requirements for teachers should be raised. Their preparation should be made more definite, and the wages paid them should be made such as will hold the best in the service of the schools.

For men and women in the industries, who have passed the high-school age, and for those who must go to work before completing the high school, ample opportunity for further instruction must be offered in evening and part-time schools, either at the schoolhouses or in the plants where they are employed. Wherever given, this instruction should be free and under the direction of the public-school authorities as a part of the system of public education.

Health and physical education.—No amount of mental education can make a people efficient, prosperous, and happy if physical development is neglected; nor can any amount of material wealth compensate for lack of health. The warm climate of Alabama, the sluggishness of its streams in their lower courses, and the marshy character of much of the land, yet undrained, give rise to many diseases unknown in other climates and increase the prevalence of others. A recent health survey of the State revealed the fact that an average of approximately one-quarter of all the people are sick all the time. More than a third of the young men examined for admission to the Army were found unfit for full military service. These facts indicate a very large and unnecessary amount of suffering and an equally great loss in productive power. Men unfit for military service are also, to an extent at least, unfit for productive labor. If 500,000 people are sick all the time, as revealed by the health survey referred to, we have some basis for a rough calculation of the cost. Let us suppose only one-half of these are of producing age, a very low estimate, and that the productive power of these would average only \$500 a year if they were well—again a low estimate. We have thus a loss of \$125,000,000 a year in the productive power of this State. Add to this the loss of the time of those who care for the sick and the loss through reduced efficiency of those who have been sick, even after they are counted as well, and to these add the loss through the low rate of efficiency of the hundreds of thousands who have not been fully developed physically and are therefore lack-

ing in strength, hardihood, and control of body, and the \$125,000,000 may well be doubled. A loss too large is this for a State like Alabama to continue to bear, if it can be avoided. And much of it can be avoided. Most of the diseases from which the people of Alabama, and especially the people of the open country and rural villages and towns, suffer are easily preventable, and the open climate, the possibilities of outdoor life, and the great variety and abundance of foods that can be made available, all should contribute to the better health of the people. All that is needed is good sanitary engineering everywhere, a wide knowledge of preventive medicine on the part of all physicians, a proper care for the health of children in school and home, instruction in regard to diet and the elementary principles of health, the establishment of right health habits, and such physical education and training as will contribute to health in the Alabama climate and make for strength and bodily control. Such care, instruction, and training should be made an essential part of the work of all schools and the Polytechnic Institute, Girls' Technical Institute, and the university, with its school of medicine, should train sanitary engineers, teachers of health and physical training, and physicians in sufficient number to supply all the needs of the State.

Commercial education.—Until quite recently the commerce of Alabama was very simple and rudimentary; and even now, despite the magnificent harbor at Mobile, it is almost wholly domestic. There has been, therefore, little demand for commercial education and for the preparation of stenographers, typewriters, clerks, and office secretaries. But with the improvement of agriculture and the development of industries in Alabama and the beginning of the new commercial era of the United States a large increase in the commercial and business life of the State may be expected. The advantages of the port of Mobile for Latin American trade should add a considerable element of foreign commerce. This will call for business and commercial courses in the high schools, especially in the cities, and for a school of commerce at the State university. Since this kind of education is for the public welfare and the service of the States as organized society, it should be supported by the public as freely as agricultural and industrial education.

Education for citizenship.—All forms of right education are in a very real sense education for citizenship, since they contribute to self-support, efficiency, public service, clean and healthy living, and a right understanding of one's place in society and in the economy of the State. But in a democracy like that of Alabama it should be counted an inalienable right of children to have such instruction and training in the things pertaining more directly to civic and political life as will enable them, when grown to manhood and womanhood,

to assume the responsibilities of citizenship understandingly and perform the duties thereof intelligently, with good will, and effectively. In Alabama most or all of the problems of civic and political life and the responsibilities and duties of citizenship common to other democratic States exist in greater or less degree. Many of these are complicated and made more difficult and new ones are created by the fact that here two races, widely different in origin, nature, development, and traditions, live side by side on the same soil and under a form of government which requires equal rights before the law for all, without regard to racial or other conditions. It is therefore doubly important that the schools of this State should provide proper instruction and training in those things relating directly to civic and political life. Lack of education in these things might prove fatal at any time.

Teachers.—For such schools as Alabama must maintain and for such education as the public welfare requires to be given in these schools, teachers of the best ability will be needed. The highest interests of the State require that the teachers of the children of the State, white and colored, in schools of all grades, in city and country, shall be men and women of good native ability, good general education, and possessed of the professional knowledge and skill necessary for success in this highest and most difficult of all work. Possibly a democracy has no higher function than that of selecting and placing and keeping in the schools such teachers. So long as Alabama undertakes to run its schools and educate its children with teachers having no better education and training than the majority of the teachers of the State now have, it must be doomed to disappointment. The State and its responsible officers must remember that if there be good reason why the children of one community should be given teachers of good native ability, well educated and well trained, so that the money, time, and opportunity of the children may be used to good advantage, there is equal reason why the children of any and all other communities should be given teachers of no less ability. It is recommended in this report that the four class "A" normal schools for white people and the normal school for colored people shall be more fully developed, and that within the next four years the State appropriation for their support shall be increased to \$35,000 for each school. But it should not be supposed that these schools thus supported will ever be able to furnish an adequate supply of teachers for the schools of the State. Alabama must expect to spend not less than a half million dollars a year on normal schools before the supply of adequately prepared teachers will be sufficient to meet the needs. Until something like this is done, the work of many of the schools must continue to be unsatisfactory. Money spent for the

preparation of teachers may well be considered as an insurance fund, protecting the public against loss of the money otherwise invested in the schools as well as against loss of the time of the children and the opportunity which the schools are supposed to offer them, and which, once lost, is lost irrevocably.

- *Education for individual culture, social purity, and idealism.*—In urging education for production and citizenship, the survey commission would not be understood as having sympathy with any theory of education or of social economy which would make of any class of the people merely good working cattle or industrial machines, however effective, to be cast aside when better can be made of wood or steel. Nor does it understand that the performance of civic and political functions, however intelligent and wise, is the highest expression of human life, or the proper preparation therefor the most important thing in education. The development of the mind, the training of the powers of observation and reason, the cultivation of the imagination, the purification of the heart, the formation of the will, the things that make for that indefinable something called "good breeding," are still more important. Of the value of this element of education, however, the people and the schools of Alabama have had a fuller appreciation than they have had of other elements. In their aristocracy of education it has held a high place. Unfortunately, it has been the heritage of too few, and has too often lacked the accompanying strength and practical efficiency of other elements. It is to be hoped that all that was best in the old education, designed for the few, may be saved as a transforming and refining element in the more democratic education of all. So long as the roots of the present and the future hold in the past there is good reason to believe that it will be so.

- *The education of all the people.*—In writing this prevision of what education in Alabama should be and in making recommendations for the improvement and development of the State's system of public schools, it is remembered that the population of Alabama is made up of two races, differing in many other respects as widely as they differ in complexion, and that fully 40 per cent of the people are of African descent, former slaves or the children and grandchildren of those who were slaves only a little more than half a century ago. The difficulties and cost of maintaining a double system of schools for two races and the prejudices against the education of Negroes, which is still strong in the minds of many of the good people of the State, have not been forgotten. Nevertheless, the committee unhesitatingly recommends that the State and its local communities undertake the task of the fullest and best possible education of all its people of both races, and assume the burden and responsibility of providing adequate

schools for all the children of both. The interests of each race depend to a very large extent upon the education of the other, and the welfare of the State depends on the education of both. This is the more easily seen when it is understood that education is not alone for chiefly for the profit of the individual educated, but for the service of society, State, and Nation; for the increase of material wealth, for safety from disease and crime, for civic righteousness, and the fuller attainment of the higher ideals. Alabama can never be as rich, as strong, as free from disease and crime as she might and should be, and can never begin to attain the ideals long held by a large majority of the best of her people so long as the 40 per cent of her population which is colored are condemned to poverty, weakness, disease, crime, superstition, and low ideals, through ignorance and lack of proper education and training. However much one may wish it were otherwise, the two races in Alabama are bound up in the sheaf of life together. Their destinies are inextricably intertwined. Neither can rise or fall without affecting the other for good or ill. Industrial and agricultural efficiency and commercial prosperity require the education of all. Ignorant white farmers are an incubus upon the agricultural development of any State. So, also, are ignorant Negro farmers. Unskilled and inefficient white workmen retard industrial development. So do unskilled and inefficient Negro workmen.

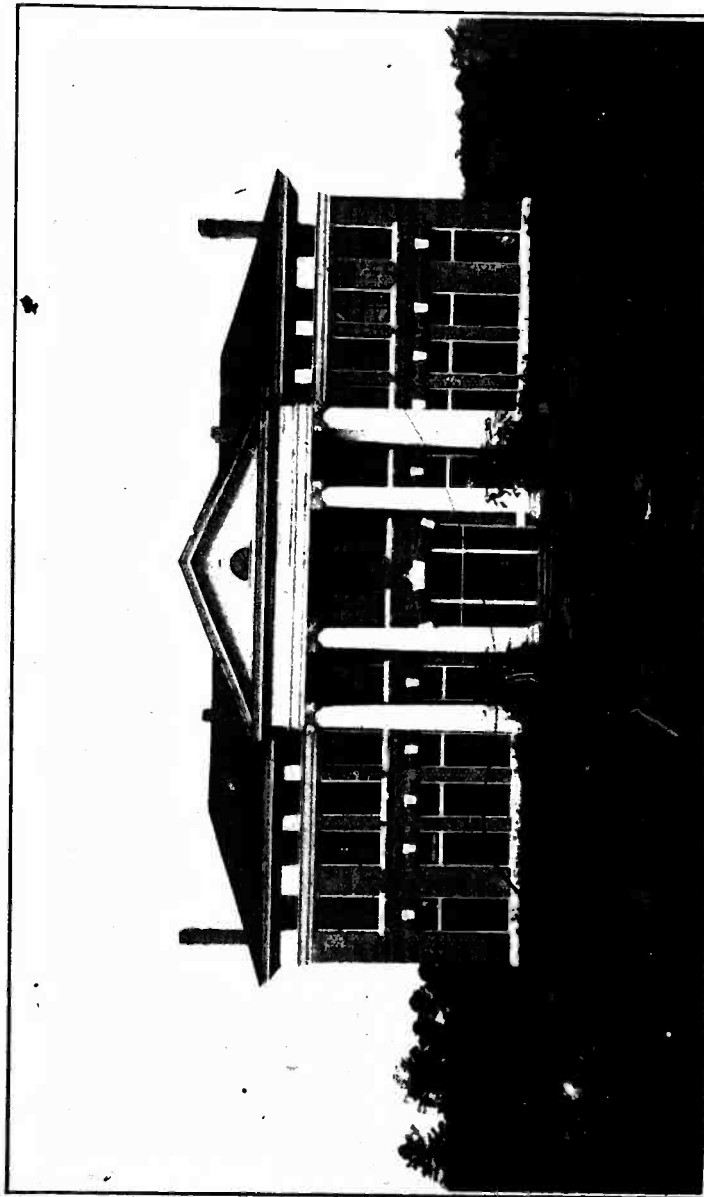
The ideals of Alabama demand absolutely that the two races be educated separately. Along with this should go the further demand that each race be educated in the way that will develop the particular kind of efficiency of which it is most capable, and which will assure its own happiness and welfare and its highest possible service to society, State, and Nation. This is due not only to the State as a whole, but the highest welfare of each race depends on it. There is no conflict of interest here. The prosperity of the people of either race in Alabama demands that there be the fullest and best education of the people of the other race as well as of its own. If either race is inferior in the things necessary to the welfare of the State, material, civic, or spiritual, it should have special help in making up this deficiency. If either has possibilities beyond the other for service in any particular field, these possibilities should be fully developed for the good of both races and of the State. This does not mean social equality or social mixing. The figure of speech, wise as eloquent, used by Booker T. Washington in his Atlanta Exposition address many years ago, still holds and shall hold: "In all things purely social, separate as the fingers, yet one as the hand in all things essential to mutual progress." Not by keeping Negroes from acquiring education can the white race retain its place of leadership, but by direct-

ing the ignorant Negroes aright and preparing them to become industrious and clean members of society.

It will no doubt finally cost approximately as much in proportion to numbers to educate the children of one race as it will to educate the children of the other. If, through native ability, the children of one race respond more readily to the processes of education and profit more by them, the very lack of equal ability in the children of the other race may well be accepted as an indication of greater need for all that education can do for them. Toward greater equality in education and in expenditures on the schools of the two races the State should, and no doubt will, move as rapidly as conditions will permit.

The survey committee fully understands that such a program of education as is outlined in this report can not be put into full operation at once, but it hopes that it will so commend itself to the good sense of the people of Alabama that they will within a few years adopt all that is most essential in it and finally go far beyond its formal recommendations.

To provide adequate means of education for all the people of the State will cost much money, and the State is still comparatively poor. But the people of Alabama surely have not forgotten the cry of her great son, whom they have since honored by placing his statue in the Capitol at Washington: "We are too poor not to educate," and his oft-repeated argument to show that only through education can the State and its people ever grow rich. Nor should they need to be reminded of his declaration that in a democracy every dollar of wealth is under first mortgage for the education of all the children of all the people. Since Curry lived and pleaded with the people of Alabama and other States of the South to make education their first interest and to maintain their schools despite their poverty, these States, and Alabama among them, have emerged from their 40 years of wandering in the wilderness of poverty and uncertainty. They have taken new courage and are now beginning to claim for their children opportunities of education as good as the best and to feel that they are able to do for them whatsoever they will. Not Curry alone, but most of the greatest and best of the leaders of the State, have understood and urged the importance of adequate education for all the people at the public expense. In her new-found strength, Alabama may well heed the advice of her leaders whom she has delighted to honor.



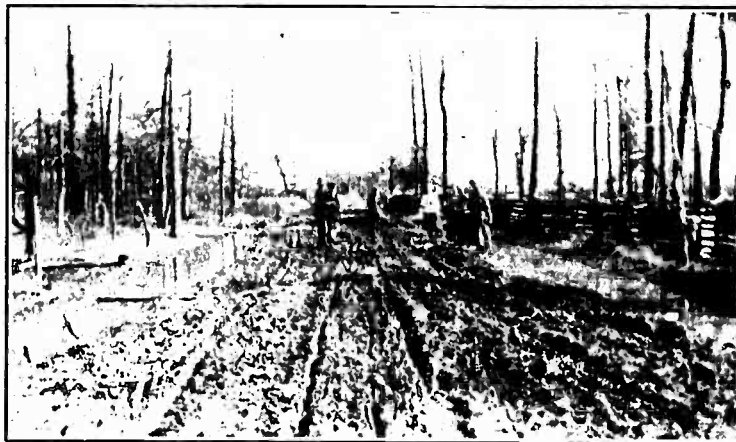
A HIGH-SCHOOL BUILDING OF THE BETTER TYPE—DALLAS COUNTY HIGH SCHOOL.



TYPICAL HOME OF AN ALABAMA "SMALL FARMER."



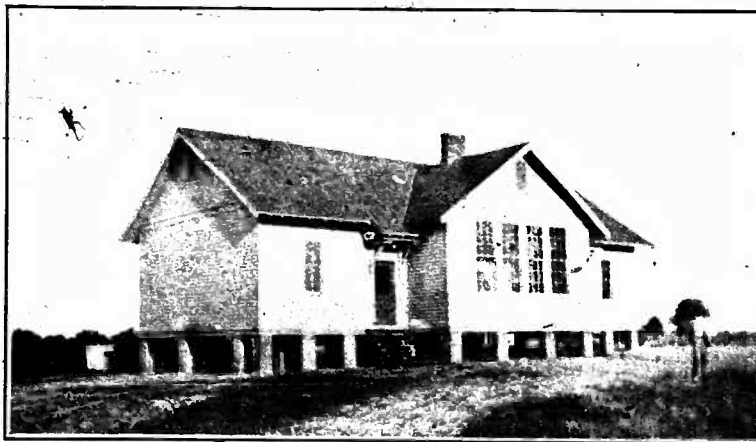
TYPICAL NEGRO CABIN IN ALABAMA.



A. ROADS LIKE THIS GO HAND IN HAND WITH POOR SCHOOLS.



B. THE PREVAILING CROP OF THE "BLACK-BELT," ON A GOOD ROAD.



A. A COLORED SCHOOL UNUSUALLY WELL CONSTRUCTED.



B. A WHITE SCHOOL OF THE BETTER TYPE IN COVINGTON COUNTY.

Chapter III.

HISTORY OF PUBLIC EDUCATION IN ALABAMA.

Early backgrounds.—A study of the development of the Alabama school system is at once disappointing and reassuring—disappointing because of the numerous failures that might have been averted and the many promising beginnings that attained little success; reassuring because of the high points here and there reached, the absence generally of any considerable retrograde movement, and the presence in every period of at least a small coterie of able and far-seeing friends of public education.

Like other Southern States, Alabama, followed the theory of Thomas Jefferson and developed its educational system from the top downward: The system was developed from the top downward, in fact, in a double sense, for not only was the State university established more than two decades before there was any general system of public schools, but the scheme of public school support likewise had its origin at the top—in Federal grants and State appropriations or subsidies—and for many years local taxation, either county or district, played little part in the provision of the school revenues.

The first school in what is now Alabama was established in 1779 at the boat yard on Lake Tensas not far north of Mobile.¹ Thirty-two years later, in 1811, an academy in Washington County, then a part of Mississippi Territory, was chartered by that young Commonwealth, and in 1818 St. Stephens Academy was incorporated at the old town of St. Stephens in the same county; these appear to have been the same institution. In 1812 Green Academy made its appearance at Huntsville in the Tennessee River Valley. Such were the beginnings of education in the territory, which on December 14, 1819, became the State of Alabama.

On its admission to the Union Alabama received the usual Federal grants of lands for educational purposes. These comprised the sixteenth section in each township for the endowment of the common schools and two townships, or 46,080 acres, for a "seminary of learning." Two facts in connection with the grant for the common schools are of special interest. In the early years of the State's history the funds derived from these lands constituted the only public source of revenue for the schools; no intra-State public funds

¹ *History of Alabama*, Owen's ed., p. 469.

were provided until after the establishment of the Mobile school system, in 1826. The variation of value of these lands and their failure to produce anything like adequate school revenue for the State as a whole, added to an improvident habit of thinking which they begot in the popular mind, gave rise to difficulties that were still to be seen or easily traced many years after the grant was made. The second notable fact is that, like other Federal grants for common-school purposes prior to the admission of Michigan, in 1837, the grant to Alabama was made, not to the State for the use alike of all the schools within its borders, but to the several townships within the State. Granted in this way, the sixteenth section became in each case the property of the township in which it was situated, though the State was made the trustee. Obviously the Government's policy pursued after 1837 was preferable to that of giving land to the township as was done in Alabama. For naturally the best lands were the first to be settled and soon became the homes of the wealthiest part of the population, and in consequence the more valuable school endowments were in the wealthier communities. The Government's gift was therefore most bountiful where least needed and most niggardly where the needs were greatest. This condition, which only added to the self-sufficiency of the well-to-do communities, particularly in the Black Belt, and its companion evil, the aversion of the well-to-do to the free school, which was thought of only as an institution for "indigent persons," were bulky obstacles in the way of the public-school movement in the State.

It seems safe to assume that such schools as existed in Virginia, the Carolinas, Georgia, and Tennessee, from which emigrants removed to Alabama, were carried by these emigrants to their new homes, though the Alabama school may have taken somewhat different form. Writing of life as it flourished in the town of Montgomery in the early twenties, Prof. Petrie says: "A wholesome respect, at least, was shown for learning in the prompt establishment of schools and in the advertised arrival of such sturdy books as Murray's Grammar, Webster's Speller, Watt's Psalms and Hymns, and (for lighter use) song and dream books."¹ But these were not free public schools, nor yet were they public schools in any present-day sense. They were, in a word, subscription schools. A teacher who was thought qualified was permitted to organize a school, or interested citizens of the community would make the preliminary arrangements, and the teacher was paid by means of tuition fees usually in a manner guaranteed in advance by a form of subscription. These schools, though of the nature of private institutions, soon began to be subsidized with the income of the township school lands or of the endow-

¹ George Petrie, "Montgomery the Cradle of the Confederacy," in Powell's "Historic Towns of the Southern States."

ment derived therefrom. But in all probability there were many communities of the State in which not even this primitive type of school was organized.

Beginnings in Mobile.—By act of January 19, 1826, the Legislature of Alabama passed the first law in the State that saw in the provision of schools a public responsibility. This act applied to Mobile County and created a board of school commissioners whose function was to "establish and regulate schools" and otherwise to promote the education of the youth of the county. Public funds were provided from such sources as land grants, certain fines and penalties, taxes on auction sales and shows, small fees on suits in court, and 25 per cent of the "ordinary county tax." From this auspicious beginning, one might expect to find that the county school commissioners organized public schools and conducted them in some degree of accord with present-day practice, but such was not the case. As a matter of fact, Alabama, even in one of its most advanced communities, was not yet ready to provide public schools.

For a quarter of a century the schools of Mobile struggled, sometimes for existence, and at other times to hold a bit of ground that had been gained, but always there was want of adequate public support and proper administration as a public enterprise. The money derived from the sources of revenue provided in the law were generally used to subsidize private institutions, the school commissioners being little more than agents for the receipt and distribution of these moneys; and Barton Academy, a public-school building erected in 1835-36, was rented to private schools and for other private purposes. There was even a proposal in 1852 to sell this academy, but the time had come now for the public school. The people, thoroughly aroused, voted overwhelmingly against the proposal to sell, and thus marked the beginning of a public-school system in fact. The schools were reorganized under a new law, and on a public basis, and the system thus inaugurated has, with improvements from time to time, continued to the present day.

The State system.—While the Mobile schools were coming through their struggle from 1826 to 1852, those of the State at large were running a somewhat parallel but even more laggard course. A law of 1819 did little more than direct that the proceeds of the sixteenth section of land be used for educational purposes, but in 1823 a somewhat clearer conception emerged in an act which provided for district trustees and the organization of schools. These schools, however, were to be supported by subscription or tuition fees in the case of parents or guardians able to pay, and the income of school lands and funds was applied to payment for the tuition of poor children. Here is seen in clear outline the old idea that a free school was for

"indigent persons" only. Such as there was of public school was hybrid-public and private.

No very important change in the school law was made prior to 1839. In that year the State bank and its branches were directed to pay out of their net profits \$150,000 annually to the schools, and in 1840 this amount was increased to \$200,000. Thus the State, in 1839, began to participate in the support of schools within its borders, but, as has too often been the case, a mere makeshift was mistaken for a sound system of support of public institutions. In 1843 the State bank, owing to its mismanagement and the long period of financial depression then prevalent, was unable longer to survive the strain, and this source of school support went out of existence. The schools now settled back to the tuition-fee basis; even the permanent funds, which included the surplus revenue fund of 1836 and were in large measure invested in the stock of the State bank or otherwise involved with its assets, were lost with the fall of that institution, though the State's resultant indebtedness to the school fund was subsequently recognized and honestly assumed. To the mistaken policy of the Federal Government in granting school lands as it did at the time Alabama was admitted, to the misconception of the people of the State in regarding these grants as practically all that was needed in financing education, and to the aversion of the well-to-do dominant class to free schools, there was now added for a time another retarding element, the discouragement that always attends the loss of money or property. And moreover, the dominant political forces now had additional excuse for doing little or nothing to promote public education.

Another cause of loss from the resources of the schools was the failure in early years of some purchasers of sixteenth-section lands to pay all of the purchase price and the failure in some cases to sell the lands at the highest market value. The low estimate which was placed on public-school resources in that day and the tendency toward neglect and mismanagement of the school lands were conducive to dishonest practice on the part of those who were willing to take much value for little or nothing paid. Nor was the legislature always blameless, for not only did it fail to enact constructive legal measures for husbanding the school endowments, but it also fell into the practice of extending by special acts the time of payments on land purchased and otherwise encouraging delinquency on the part of debtors to the school fund. It is the old story of mismanagement and tendency to dishonesty in connection with that which came as a gift and without outlay of effort by the recipient.

Through the long period of vicissitudes and difficulties which beset the schools prior to the enactment of the public-school law of 1854 there was probably no time when public education was without many

friends in the State. If the educational profession is thought of, there was no State in the South which had an abler group of men. Among these were Dr. Basil Manly, president of the University of Alabama from 1837 to 1855, and one of the best-known southern educators in ante-bellum times. Associated with him at the university was a group of faithful and scholarly professors, among whom were Dr. Frederick A. P. Barnard, afterwards president of Columbia College, New York; Prof. Michael Tuomey, who made a geological survey of the State; and Prof. J. W. Mallet, F. R. S., afterwards of the University of Virginia. In the field of secondary education was Dr. Henry Tutwiler, for many years head of the Greene Springs Academy, in Greene County, and father of Julia S. Tutwiler, a distinguished Alabama educator and social worker of post-bellum times and principal of the State Normal School at Livingston from 1888 to 1913.

Nor was education without friends in other vocations, for it counted among its advocates many ministers and no inconsiderable number of leading men. The legislature early had a "committee on education," and an old chronicle¹ tells us that this committee in several years submitted "able reports," but an able report seems to have been thought sufficient by the dominant element in the legislature of the thirties and forties. In 1837 Daniel P. Bestor, a Baptist minister, entered the legislature from Greene County. He was thoroughly imbued with the educational spirit and determined, if possible, to improve the school law. Through his efforts a special committee on education was created, and he became its chairman, but another "able report" was all that he ever had to show for his pains. He retired from the legislature in disappointment, and perhaps in disgust. The Rev. Mr. Bestor was in the field too soon for positive accomplishment, but such efforts as his would presently bear fruit.

It should be said, in mitigation of the neglect of the common school by the political leaders, that there was much else to engross their attention. Between 1820 and 1850 the white population of the State increased from 85,451 to 426,514, or 499 per cent; and the number of slaves mounted up from 41,879 to 342,844, an eight-fold increase. To keep legislation abreast with the State's material growth was no small task.

The coming of the public school.—In the school of experience, as Dr. Weeks suggests,² Alabama was learning to keep school. By a process of empiricism the State was developing its own type of public-school system, there being little of the best educational practice to learn from near-by States.

¹ Garrett, *Public Men in Alabama*.

² Stephen B. Weeks, *History of Public School Education in Alabama*, p. 43.

It was in the decade immediately preceding the Civil War that public schools in fact came into existence throughout the State. By act of February 15, 1854, the legislature provided for a State distributive school fund including a direct appropriation, a county school tax, a State superintendent of education, boards of county school commissioners, township trustees, and for the examination and certification of teachers.

The first State superintendent was William F. Perry, afterwards a general in the Confederate Army. He immediately set about the organization of the smaller administrative units, the enumeration of the children, and the general supervisory work of getting the system in motion. The legislature in 1856 amended the school law at several minor points and in one important particular. The latter embodied a provision for county superintendents of schools.

Perhaps a better understanding of the occasion of the establishment of the public-school system of Alabama may be had if the reader will turn aside for brief notice of the men, three in number, who are generally credited with the leading part in putting through the legislature the school law of 1854. In the senate the man who wielded most influence in this respect was Robert M. Patton, of Lauderdale County, and afterwards governor of the State, who was born in Russell County, southwestern Virginia, in 1809, and whose parents had removed with him to Alabama when he was still a child. His father was a native of Ireland and belonged to that sturdy stock known in this country as Scotch-Irish Presbyterian. When this fact is considered it is not hard to understand how young Patton came to be a friend of education. There were many of the Scotch-Irish stock among the settlers of north Alabama.

The chairman of the committee on education in the lower house and the man who drafted the educational bill was Alexander B. Meek, who was born in Columbia, S. C., but who, like young Patton, was brought by his parents to Alabama in his early childhood. He was graduated from the university and became a lawyer. In the administration of President Polk he resided about two years in Washington as a legal adviser in the Treasury Department. Returning to Alabama, he became United States attorney for the southern district of the State and soon thereafter established his residence in Mobile. Being a man of literary attainments and an able lawyer, and having had a period of residence at the National Capital, he was eminently fitted to assume the chairmanship of the important committee to which he was assigned and to obtain for his committee a respectful hearing.

It will be noted that Mr. Patton represented the extreme north-western part of the State, and Mr. Meek the southern end. From Talladega County, in north-central part, there came a young rep-

representative not yet 30 years old, who was also placed on the house committee, and who soon showed himself an able lieutenant of the chairman. This young man was Jabez Lamar Monroe Curry. Born in Georgia in 1825, he had been brought by his father to Alabama when about 12 years of age, but returned to Georgia for his college education and studied law at Harvard University. Thus, like his able chief on the committee, young Mr. Curry had come under strong extrastate influences which had no doubt given him a broader view of the meaning and function of the public school. The State was fortunate in having three such men as Patton, Meek, and Curry; it was doubly fortunate in having them in the legislature at the same time and at the same task. Before them opposition hitherto effective must now crumble.

A brief survey of the Alabama school system as it existed in the half decade immediately preceding the outbreak of the Civil War must suffice here. Writing of the establishment of the system many years after his incumbency as the first State superintendent of education, Gen. William F. Perry, said: "Alabama was the first of the cotton States, and one of the first of the slave-holding States to enter upon such an undertaking."¹ But some allowance should probably be made for Gen. Perry's father-like enthusiasm over the school system the beginnings of which had taken form under his care. What is probably nearer a correct statement is that between 1856 and the outbreak of the war Alabama had one of the most effective school systems in the whole South and apparently the most effective in the lower South. In his last published report,² before the schools of the State entered the twilight of the Civil War period, State Supt. G. B. Duval reported 180,160 children in the State between 6 and 21 years of age, and 98,274, or 54.5 per cent, enrolled in school. The total expenditure given for that year was \$564,210.46. In that period the State school funds were apportioned on the basis of the school census, but the State superintendent was instructed to eliminate, as far as possible, the inequalities due to the fact that some townships possessed large endowments while others had little or none.

The instruction of slaves.—Historical writers have given little or no concern to negro education in slave times. Presumably this want of concern has been due to the assumption that there was no such thing as the instruction of slaves, but as a matter of fact there was.³ No inconsiderable number of negroes in Alabama came out of slavery with the ability to read and write. At least three causes operated to give to a small proportion of the slave population a modicum of text-

¹ W. F. Perry, *The Genesis of Public Education in Alabama*, in *Transactions of Alabama Hist. Soc.*, vol. 1, 1897-98.

² For the year ending Nov. 30, 1858.

³ See C. G. Woodson, *The Education of the Negro Prior to 1861*.

book instruction. These were (1) the clandestine efforts of anti-slavery enthusiasts; (2) the profits accruing to some masters by reason of the ability of their slaves to read, write, and otherwise transact business; and (3) the kindness of young masters and mistresses in instructing their servants. There was, moreover, a more or less general feeling that negroes might be permitted to learn to read their Bibles, and what is known as "vocational training" was widespread. But the fear of insurrectionary influence and the spread of abolitionist propaganda led to the legal regulation of slave assemblies and to the creation of the patrol system;¹ and, as the abolitionists became more insistent, the education of slaves, in the case of individuals as well as in assemblies, was prohibited by law. In making this prohibition, Alabama was neither first nor last among the slave States but occupied a middle ground; its law was enacted in 1832.² These laws generally had the effect of preventing organized effort to instruct the slaves, so that such literacy as negroes possessed when emancipated was of the sort that young masters and mistresses had chosen to give, in disregard of the law, to their favorite servants.

Private academies.—Before the ante bellum period of public education is passed, it is well to note briefly the private academy, which sprang up and flourished in that period. From the admission of the State to the enactment of the public-school law of 1854, one of the principal forms which educational measures in the legislature took was the incorporation of academies, numerous such measures being considered by each legislature. In 1850 there were in Alabama 166 such institutions with 380 teachers, 8,290 pupils, and an estimated income of \$224,279.³ Academies throughout the country were in general of two classes: (1) Those whose function was to meet the local school needs, elementary as well as secondary; and (2) those designed to serve a wider clientele and organized with grammar and secondary grades with a view to drawing boarding pupils. The academies of Alabama were largely of the former type. State Superintendent Duval, in his report of 1858, noted the beginning of the decline of the academy in that State.

Higher education.—Alabama has no great number of institutions of higher learning, but in the opinion of many it has enough, if those that have been established were only more generously supported and their usefulness consequently more widely extended. The State University was the first of these institutions to be founded. It was provided for by legislative act of December 18, 1821, but not until April 17, 1831, was it formally opened. Its chief source of

¹ The occasion of the negro's fear of the "patteroller."

² Clay, *Digest of the Laws of Alabama*, p. 543.

³ *American Journal of Education*, vol. 1, p. 288.

support has been throughout its history the grants of lands made by Congress. The proceeds of the first of these grants, on the failure of the State bank, ceased to have actual existence and have since constituted only a paper fund, or an indebtedness of the State to the university. The present constitution guarantees to the university \$36,000 annually as interest on its funds. In 1865 a body of Federal cavalry destroyed nearly all of the university buildings, but in 1884 Congress made somewhat tardy but generous restitution in the form of an additional land grant of two townships, or 46,080 acres. Much of this has proved to be mineral land.

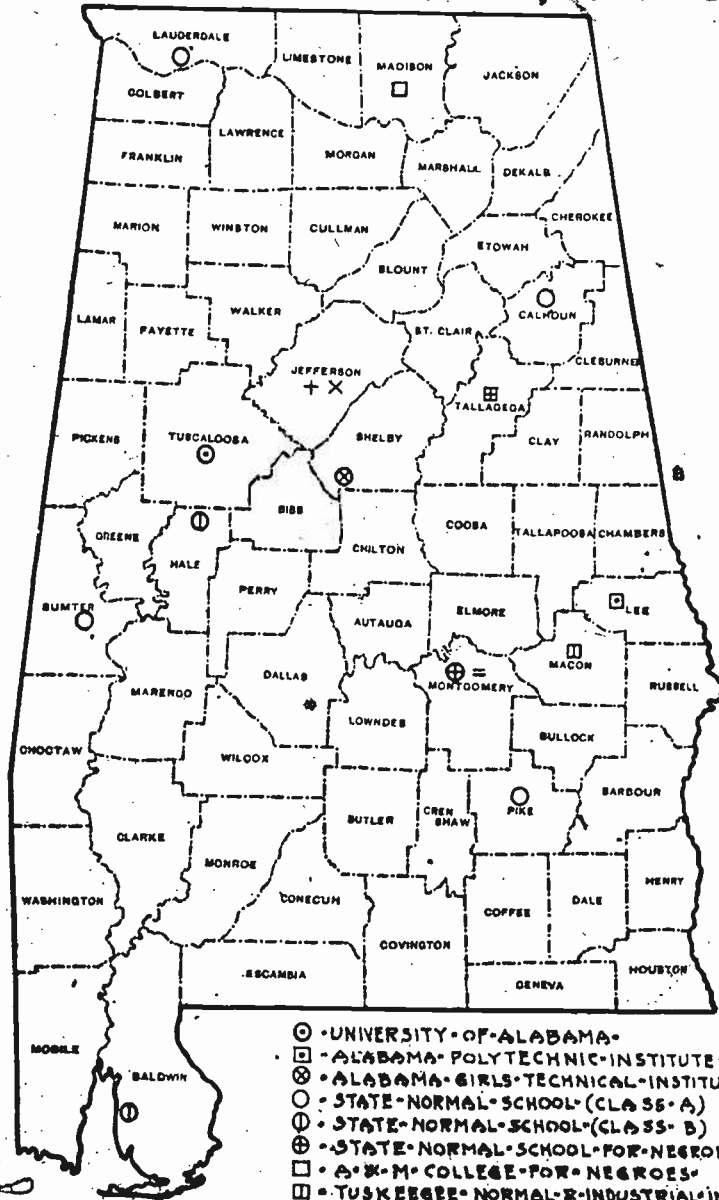
The Alabama Polytechnic Institute, formerly called the Agricultural and Mechanical College, was established at Auburn in 1872 when the State legislature assented to the provisions of the first Morrill Act of Congress, enacted in 1862. It is the State land-grant college for white persons. The corresponding institution for the colored race is the Agricultural and Mechanical College for Negroes, which was organized as a State institution at Normal, near Huntsville, in 1875.

A State institution of junior-college grade is the Alabama Girls' Technical Institute, known prior to 1911 as the Alabama Girls' Industrial School. It was established by legislative enactment in 1893 and was opened at Montevallo in 1896.

Public normal-school education was permanently inaugurated in the State in 1873, when the Florence Wesleyan University was given to the State by the Methodist Church on condition that it be used for training teachers and was thus made the State Normal School at Florence. Schools of like grade and character were established at Jacksonville and Livingston in 1883, and the Troy Normal School followed in 1887. Two other schools for white persons, now known as "Class B Normal Schools," were later established at Daphne and Moundville. The training of negro teachers was established on a permanent basis with the opening of the Agricultural and Mechanical College for Negroes and has since been extended to the normal school at Montgomery and to Tuskegee Institute.

Outline history of private and denominational institutions.—Spring Hill College, a Catholic institution founded by the Jesuits near Mobile in 1830 and chartered in 1836; Judson College, a Baptist school for girls founded at Marion in 1838 and opened January 7, 1839; Howard College, Baptist, an institution opened as a college for men at Marion in 1841, but projected several years earlier as a manual labor school, removed to Birmingham in 1887; Athens College for Women, Methodist, chartered in 1843 and located at Athens; Southern University, Methodist, incorporated in 1856 and opened in 1859 at Greensboro, united with Birmingham College in 1918; St. Bernard College, Catholic, founded by the Benedictine Order at St.

MAP SHOWING LOCATION OF STATE INSTITUTIONS OF HIGHER
LEARNING & SCHOOLS FOR DELINQUENTS AND DEFECTIVES.



- UNIVERSITY OF ALABAMA
- ◻ ALABAMA POLYTECHNIC INSTITUTE
- ⊗ ALABAMA GIRLS TECHNICAL INSTITUTE
- STATE NORMAL SCHOOL (CLASS A)
- ⊗ STATE NORMAL SCHOOL (CLASS B)
- ⊕ STATE NORMAL SCHOOL FOR NEGROES
- ◻ A. M. COLLEGE FOR NEGROES
- ⊞ TUSKEGEE NORMAL & INDUSTRIAL INSTITUTE
- ⊗ INSTITUTE FOR DEAF, DUMB & BLIND
- ⊕ ALABAMA BOYS INDUSTRIAL SCHOOL
- ⊗ STATE TRAINING SCHOOL FOR GIRLS
- ⊕ ALABAMA REFORM SCHOOL FOR JUVENILE NEGRO LAW BREAKERS

MAP 1

Bernard in 1892 and chartered in 1893; Birmingham College, Methodist, opened at Birmingham in 1898, united with Southern University as indicated above; Woman's College of Alabama, Methodist, founded at Montgomery in 1906. Two notable institutions for the colored race are Talladega College, opened in 1867 under the auspices of the American Missionary Association, and Tuskegee Institute, nonsectarian, established by act of the legislature of 1881.

The Civil War and Reconstruction.—Reverting now to the public school, we come to a period of Alabama history which all but saw the destruction of the great work of Meek, Curry, Patton, and Perry, and which in effect, directly and indirectly, retarded educational progress for more than a quarter of a century after its ghastly specter finally withdrew. Though reduced in number, deprived of a large measure of their support, and showing an attenuated enrollment, the schools of the State managed to struggle along through the war period and to maintain their general organization. The system, however, seemed to come to worse straits in the years immediately following. In the administration of Gov. Robert M. Patton, which extended from December 30, 1865, to July 13, 1868, when the Reconstruction government was inaugurated, some of the school funds seem to have been used "to meet other pressing debts of the State," there being some counties to which no funds at all were paid, or, at least, which did not draw their share. Of public school moneys at this time Dr. Weeks says: "The total apportionment for 1866 was \$413,389.07, of which \$362,223.60 was drawn and \$51,625.09 undrawn. In 1867 the figures were \$290,250.12 apportioned, \$133,195.83 drawn, and \$157,054.29 undrawn. The sum apportioned for schools December 1, 1867, to July 1, 1868, was \$45,411.46." But no wrongdoing is imputed to Gov. Patton's administration; those were trying times.

The Reconstructionists who came into full power with the adoption of the constitution of 1868 set up a school system of a new sort in Alabama. The constitution provided for a State board of education with legislative powers in respect to the schools and with administrative control over the whole system, from the university downward. The old educational fund was declared a "perpetual fund," and the State was obligated to pay interest on it; "one-fifth of the aggregate annual revenue of the State" was to be set aside for schools, and local and poll taxes were authorized.

Three outstanding facts in connection with the schools of the Reconstruction period were a strong centralized State control, an apparent effort to provide more public funds, and a provision in the constitution that the schools should be entirely free. Some of the results obtained were a top-heavy, inefficient, and otherwise questionable

¹ Weeks, *History of Public Education in Alabama*, p. 85.

administration; an appreciably good system on paper, but in actual practice a system without sufficient funds to provide absolutely free schools, as they purported to be, for reasonably long terms and with the right kind of teachers; and a feeling of hostility on the part of most of the white people to anything that had its origin with what they chose to call the "carpetbagger" and the "scalawag."

On the displacement of the constitution of 1868 by that of 1875 and under the new constitution the enactment of the laws of 1877 and 1879, the Reconstruction school system, except for a vestige here and there, passed into desuetude, and a new system, founded for the most part on the laws of 1854 and 1856, arose instead. When the "men of the old school" regained control of their State they simply returned to the point whence they had left off at the outbreak of the war. Of the effects of Reconstruction Dr. Weeks says: "The constitution of 1868 and the Reconstructionists did little for education in Alabama. There is no ground for the claim that Reconstruction and the Freedmen's Bureau founded (or even substantially advanced) the cause of public education in that State."¹

A quarter century of recouperment and resumption of progress.—To sum up from the beginning of the Civil War, it may be said that the strife, turbulence, financial strain, and final despair of the war period and years immediately following told heavily on the schools; that the Reconstruction system, exotic, unwelcome, and mismanaged, was a misfit; and that a new order must arise from the ruins of the old.

The constitution of 1875 omitted the provision for a State board of education. As a result of this omission the State educational institutions each passed to the control of a board of trustees, and the general supervision of the common schools was vested in the State superintendent of education. The constitution no longer applied one-fifth of the income of the State to schools, but provided a State appropriation of \$100,000 and directed that more should be appropriated when the finances of the State should warrant. The interest on the school fund was pledged, and a poll tax for the benefit of the schools of the several counties where collected was authorized. Local property taxes, which had never obtained considerable hold in the State, were not provided for, except in Mobile County, which still retained its separate system, but local revenues for general purposes might, so long as the constitutional limitation was not exceeded, be appropriated in part to schools. This practice became widespread in incorporated municipalities, but attained little vogue in the case of counties. In the later years of the period here considered, a few counties availed themselves of the privilege.

¹Weeks, *History of Education in Alabama*, p. 114.

Under the new order county superintendents were appointed by the State superintendent and continued to be so appointed until 1889, when they became elective. The unit of local school administration was the township, except in the case of incorporated municipalities and of districts created by special acts of the legislature, of which there came to be many. Territory not organized as municipal or special school districts remained under township organization until 1903. One township trustee was at first the local administrative officer, but the number was later increased to three. Teachers were certificated by county superintendents. The practice of supplementing public funds with subscriptions and tuition fees continued. The basis of apportionment of State funds was the school census, as it had been under the laws of 1854 and 1856. Negro education, which had begun in Gov. Patton's administration and had been extended by the reconstructionists, was continued in this period. The constitution of 1868 was silent on the matter of separate schools for negroes, but in that of 1875 we find that "separate schools shall be provided for the children of citizens of African descent."

Such, in brief outline, was the school system provided by the constitution of 1875 and supplementary acts of the legislature passed in 1877 and 1879. Little radical change was made in the school law between 1879 and 1898, but some noteworthy new provisions were added. Facilities for training teachers were extended; more liberal provisions were made for the development of city school systems; and by 1895 a chain of congressional district agricultural schools, one in each such district, had been developed from a beginning with a single branch experiment station in 1885.

For the school year 1898-99 there were reported 634,061 children of school age (7-12). Of this number, 433,733 were enrolled in school, and an average of 341,138 were in daily attendance. The total receipts for school purposes amounted to \$916,450, and an average term of 100 days was maintained.¹

During the last quarter of the nineteenth century, it may be said that the Alabama schools showed progress, but a progress scarcely commensurate with the material growth of the State and therefore inadequate to the need. For, when the people started their school system anew, after the passing of the Civil War and Reconstruction period, they had fallen behind educationally, and there was need of overtaking the States that had gone ahead. That this need was not fully recognized and met is the leading count in the indictment against the Alabama people with reference to their school system between 1875 and 1898. The State was progressing educationally, and commendably so, but its progress was made relatively to its own past and not to the great advancement in other States. It was the

¹ Report of U. S. Commissioner of Education, 1898-99, vol. 1, pp. ixviii, et seq.

custom of some orators to point with pride to Alabama's educational achievements, but these orators usually confined their comparisons within the State.

The dawn of better things.—By the year 1898 it was clear that a new day was at the dawning. From the time of its adoption, the educational article of the constitution of 1875 had been unsatisfactory to many of the friends of education. The want of authority to provide local public funds was the chief point of attack, and a number of cities and towns even went to the extremity of seeking to stretch the constitutional limitation and make a local school levy. But the supreme court of the State, true to the high standard which it has long maintained, refused to read into the constitution what had not been put there by the framers, and local taxation specifically for school purposes was declared unconstitutional. The "Hundley amendment," a proposal to provide for a district tax of 2½ mills on the dollar, was submitted to the voters in 1894, but the State was at that time stirred to its depths by a bitter political contest between the Democratic and Populist Parties, and the period of financial depression was then at its worst; so the amendment was lost. But the outlook was widening, and the time was at hand for a forward movement. Many of the northern counties, and some of those in the south, were undergoing great industrial development; cities and towns either took new life or sprang up from the beginning to be considerable centers of population; and the people were more and more recognizing the need of increased intelligence.

In 1898 John W. Abercrombie, a man who knew to its remotest limits the educational system of the State, came to the superintendency of education. The times were changing, and with them the quality of the State superintendency. Mr. Abercrombie saw, as few if any of his predecessors had seen, the fundamental needs of the schools and dared to tell the whole truth with regard to them. With the question as to how much the new superintendent contributed to the changed viewpoint of the people, we shall not concern ourselves; questions of the influence of personality have always perplexed the historian. But the fact is of great concern that in the last years of the century the people began fast to become forward looking and showed a growing desire to know precisely what their educational status was. "With the administration of Mr. Abercrombie begins the modern era of public education in Alabama," says Dr. Weeks.

Mr. Abercrombie was superintendent from October, 1898, to July 1, 1902, when he resigned to accept the presidency of the State university. His recommendations to the legislature were in accord with the best educational practice of the time, and some of them were embodied in law before he left the superintendency. They compre-

hended local taxation, adjustment of the poll-tax law, apportionment of funds within the counties on the basis of average attendance, qualified county superintendents to devote all their time to school work, State certification of teachers, improved school buildings, employment and payment of teachers according to grade of certificate held, absolutely free schools for five months each year, compulsory school attendance, a single board of control for the congressional district agricultural schools, regulation of degree-conferring institutions, and appropriations for summer normal schools. In the incumbency of Mr. Abercrombie the legislature provided for a system of State certification of teachers, State uniformity of textbooks, a five-months term of free school, and for a convention to frame and submit to the people a new State constitution.

Education and the new constitution.—The constitution proposed by the convention organized to frame it was ratified by vote of the people and went into effect in November, 1901. Under its provisions, the superintendent of education remained the chief administrative and supervisory officer of the schools, but, with other State officers, was made ineligible as his own successor. The administration of the common schools and of the higher institutions remained, in fact, substantially as before. It was in the matter of school support that the most noteworthy changes were made, but even here there was no radical change in policy. The State remained the chief source of support, and the local district was still denied the right to tax itself. A substantial increase in the aggregate school funds, however, was provided. An obligatory State school tax of 80 cents on the hundred dollars was provided for, and a 10-cent county tax was authorized. Only in the case of a few specified cities was a district tax permissible, but the older practice of levying a local tax for general municipal purposes and appropriating to the schools from the fund thus provided was still valid. Again Mobile County was permitted to retain its separate system.

From these constitutional provisions the schools received decided impetus, but those who had hoped for much from the convention must have felt keen disappointment. True, the State as such was now contributing generously to the support of public education, but the much-needed local self-help, far from being encouraged, was positively denied.

Under the new constitution two adverse conditions continued as they obtained prior to its adoption. First, the schools in rural communities suffered more than those of the cities for want of funds, for the cities had recourse to appropriations from their general municipal revenues and were able by this means to maintain reasonably good schools, while the rural community had to rely on the State and county taxes alone; and these were insufficient in the

greater part of the State. The second adverse condition was the provision from State funds for the schools for whites of the Black Belt to the detriment of the schools for the Negroes of that part of the State. State funds are apportioned under the constitution to counties on the basis of the number of persons between 7 and 21 years of age, and these funds are distributed within the counties in the discretion of the county school authorities. As a result, in the Black Belt section of the State, the white schools are provided for from State funds alone and without the provision of local taxation, and the Negro schools receive less than their proper share. Thus the people of the Black Belt, feeling no need of local school funds and being therefore indifferent, if not positively opposed to local taxation, have continued one of the retarding elements in the educational development of the State.

Some of the laws enacted in years immediately following the adoption of the new constitution have already been mentioned. Further legislation enacted in succeeding years included the revision of the certification and textbook laws, the substitution of the county school district for the older township organization and community district except in the case of incorporated municipalities of 2,000 population or more, the establishment of county high schools, the provision for schools for dependent and delinquent children, the placement of the normal schools for whites under a central State board, the reorganization of the district agricultural schools, the appropriation of money for rural schoolhouses and for the development of rural-school libraries, and in 1915 a compulsory-attendance law.

The progressive school legislation of 1915.—The most important recent change in the State's school law was embodied in the constitutional amendment submitted by the legislature of 1915 and ratified by the people in November, 1916. This added to the taxes already authorized a 3-mill county school tax when voted by a majority of the electors and a 3-mill district tax when likewise voted after the county's decision to levy a county tax of 3 mills. The machinery was now provided for supporting a system of free public schools in fact, machinery which, from the birth of the State, the framers of constitutional provisions had seemed loath to see pass to the hands of the people. Two things of prime importance remained to be done. First, the permissible taxes remained to be voted in the several counties and districts, and secondly, the property valuation of the State needed to be raised to a point where it would produce adequate revenue for the support of the schools and other public enterprises. The first of these has already been in large measure accomplished.

As the educational leaders become more aggressive and forward-looking in the closing years of the past century, so they have continued in more recent years. The recommendations and efforts of all

recent State superintendents have generally been in accord with the best educational thought of the country, and whatever shortcomings may be charged to their administrations have probably been due more to the circumstances than to the personal element.

The principal fault of the Alabama educational system has been the century-old disposition of the people, particularly the molders of policies, to look too much upon education as something to be bought in the market by the well-to-do or to be provided by the State at an irksome personal sacrifice on the part of the individual taxpayer. If now the people will clearly see a public responsibility in the provision of schools and will wisely put ample public money in them as an investment paying large dividends, the State may soon take educational rank suited to its great material advantages.

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Chapter IV.

ORGANIZATION OF THE STATE SYSTEM OF EDUCATION.

GENERAL STATE ADMINISTRATION OF EDUCATION.

The superintendent of education the most important State administrative official in Alabama.—Education is the most important business of the State. It will become even more important in the years to come as the enlarging conception of the Nation's educational needs become more firmly fixed in the lives of the people. In Alabama the superintendent of education administers more than one-half the funds raised by State taxation. This amounts to several million dollars a year. He is charged with "general supervision over all the educational interests of the State" and partly with the "care and improvement of the common schools and the promotion of public education."¹ In a sentence he is, under the State constitution, the administrative and supervisory head of the whole State system of public education, and his authority extends *de facto* to the State's higher educational institutions also. The State superintendency in Alabama is, therefore, a big man's task—none in the State is more important or more difficult, if one takes into consideration the constitutional and financial limitations of the office.

Legal limitations of the superintendency.—By constitutional prescription the "powers, duties, and compensation" of the State superintendent "shall be fixed by law."² This has given the legislature broad discretionary powers, which have been used here as in many other States unintentionally to limit the administrative and supervisory efficiency of the office. The State superintendency is more important than the presidency of either the university or the Polytechnic Institute, but popularly the office is not so classed or ranked. It is a political office; the tenure is limited by law to one term of four years, and the salary—fixed by law at \$3,000 per annum—is so low that the exceptionally capable men who have of late years held it have done so at a real financial sacrifice.

Education should be wholly removed from party politics. This needs no argument. Alabama has for many years chosen its city superintendents from the ablest available candidates, regardless of political affiliation or residence. Since 1915 Alabama county super-

¹ General Public School Laws of Alabama, 1915, par. 1685.

² Constitution of Alabama, Art. XIV, sec. 362.

intendents have likewise been appointed regardless of politics, with most satisfactory results.

The greatest objections to electing the State superintendent of education by the general electorate are the following:

1. This method of selection limits the field from which to choose, as the superintendent must be a citizen of the State. In States where the superintendent is appointed by the State board of education or by the governor he may be selected from the country at large. Such freedom of selection is clearly in the interest of better service.

2. Where the State superintendent is selected by popular vote the salary is fixed by law. The salary can not be adjusted to fit the person desired, but a person must be found to fit the salary.

3. Where the State superintendent is elected by popular vote the term of office is short—two to four years—and reelection is uncertain. This lack of continuity in the service is a serious handicap to the superintendent and the service, however capable the superintendent may be.

4. This method of selection makes the office political, and subjects it to all the fluctuations of party and factional politics.¹

Permanent professional superintendents in other States.—The trend of the times is to make the State superintendent an appointive official. This is now so in 17 leading States. In most of these States there are no limitations in regard to previous residence. The superintendents are, as a matter of fact, appointed from the country at large, chiefly for their professional ability and success. As recent illustrations of this modern way of choosing superintendents may be mentioned New Jersey selecting a commissioner of education from Indiana, Pennsylvania selecting its superintendent of public instruction from New York, Massachusetts obtaining its commissioner of education from Maine, and Maine in turn recruiting its State superintendent of education from Nebraska. But it would probably not be necessary to go far afield for this official; the important thing is to make the office appointive.

One or another of two different systems is commonly followed in choosing a professional State superintendent. The governor may appoint him or he may be elected by a State board of education. The latter method is considered the more satisfactory. Where the choice is left to the governor there is at least the old danger of continuing the office in politics. If chosen by a nonpolitical State board of education this danger is minimized. The first appointment might be probationary for a term sufficiently long to demonstrate the appointee's fitness for the office. Reappointment should be made for an indefinite term of years, the State board retaining the right

¹ See Manual of Educational Legislation, Bur. of Educ., Bul., 1910, No. 4, p. 12.

to remove the incumbent from office for misfeasance or malfeasance. With the administrative freedom possible under such a permanent organization as this, the State superintendent would be able to raise the office to the importance given it in the constitution, and which it must reach if the best interests of school education are to be conserved in the State.

It may also be observed that the States which have permanent professional superintendents likewise pay better salaries than the other States do. The following are some of the States which place a premium on scholarship, experience, and general fitness, by appointing their superintendents, and the salaries paid them: Pennsylvania, \$12,000; New York, \$10,000; New Jersey, \$10,000; Massachusetts, \$6,500; Rhode Island, \$5,000; Minnesota, \$5,000, and Ohio, \$4,000.

Present organization of the State department of education.—The State superintendent is charged, under law, with many important administrative, inspectional, and supervisory duties. He administers the State's general educational fund; he keeps account of the capital of the sixteenth section and other trust funds; he apportions the State's funds to the several county boards of education and examines the accounts of these boards. Aside from his duties as the State's financial administrator of education, he is charged with the direction and supervision of all the urban and rural schools, both elementary and secondary. He is expected to supervise all these schools, to help and direct county and city superintendents of schools, and the teachers working under their direction. He is likewise president or member of many boards, including the State board of examiners, the State library commission, the State illiteracy commission, the State high-school commission, and the State vocational board, all of which call for expenditure of much time and energy. He must also prepare and present an annual report to the governor and prepare occasional reports on other educational subjects; all this he does in addition to his voluminous correspondence which covers all phases of school administration and supervision in the State.

To carry out these manifold duties and responsibilities to the letter would require a much greater staff of assistants than the law allows. It is important that the legislature realize that it avails little to charge a State superintendent with many administrative, supervisory, inspectional, judicial, and other duties unless it gives him a sufficient "inside" and "outside" staff of assistants to help carry out his educational plans.

Now, what provision has the State made to supply the office of State superintendent with an effective staff of assistants? The statutes limit him to one chief clerk, two bookkeepers, and one stenographer.

This staff may have been sufficient when the office was organized, but it is wholly inadequate now. It is true that the genius for organization on the part of the present superintendent and his immediate predecessor has drawn together at the State department's offices an exceptionally efficient staff of workers, some of whose salaries are provided by special legislative appropriation, and some by private foundations or by public subscription. The General Education Board pays the salaries of two rural-school agents, one for white and one for colored schools. The staff of the Alabama illiteracy commission is maintained by private subscription, and the State board of examiners and the State institute and teacher-training staff, which are also considered as part of the department of education, are paid by direct State appropriation.

As was mentioned above, the office is well organized and performs a great service to the State; but it is highly important that the legislature come to the superintendent's assistance at this time and furnish the enlarged clerical force requested by the State superintendent in his annual budget, which is referred to later in this chapter. Not alone are clerks and stenographers needed; the 175 odd secondary schools should be inspected and classified by a State high-school inspector working out from the State department; a technically trained examiner of accounts is needed to check up the books of the county boards of education and other boards that receive State educational funds. This is quite apparent when one recalls that practically one-half of the State's entire revenue is expended in education. These and other assistants must be provided to make the department as efficient as the State superintendent would like to make it.

A larger conception of the importance of the office.—The public conception of the functions of the State superintendency has undergone marked changes in recent years. The thinking public are beginning to realize that there is no more important office in the gift of the State than this office which is charged with the education of the future citizens of the State. The State superintendent has, in most States, been a political functionary liable to all the fluctuations and changes in party politics. His usefulness has generally been limited because of poor financial support. The old superintendency is still limited to the mechanical routine of office administration in many States. This is highly unfortunate. In Alabama the State superintendent of education has always exerted considerable influence in shaping educational policies. The legislature should now make him the real head of the educational system of the State by removing the office from political influence, by dignifying it with a salary commensurate with its high importance, and in other ways increasing the direct power of the superintendent. In fact a complete reorganization of the office seems highly necessary in order to make the super-

intendent the chief administrative official of the State-wide school administrative system recommended by the survey committee in later paragraphs of this chapter.

The State school system not organized as a well-articulating organism.—The State system of schools, from the elementary schools to the higher educational institutions, is administered by a multiplicity of boards, each ambitious to further the immediate interests of its own small part of the school system, even at a cost of administrative efficiency and financial loss to the schools as a whole. The school system of Alabama has not developed by natural outward growth but rather by periodical accretion, by adding to from time to time regardless of the effect on the schools as an organized whole. Whenever a new school has been brought into existence through legislative enactment, it has been provided with a board of its own. Many schools have come into existence on account of strong local influence and for no other reason, regardless of whether they really articulated in the established system or not.

The University of Alabama, the Alabama Polytechnic Institute, the Alabama Girls' Technical Institute, the six normal schools for white teachers, the district agricultural schools, county high schools, the Northeast Agricultural and Industrial Institute, the Agricultural and Mechanic Arts College for Negroes, the Montgomery Normal School for Negroes, Tuskegee Institute, and the two schools for deaf and blind, the Alabama Industrial School for Boys, the State Industrial School for Girls, and the Alabama Reform School for Juvenile Negro Lawbreakers, are all administered under separate boards whose administrative activities are limited only by the statutes under which they were organized. It is true that the governor and State superintendent of schools, and occasionally other officials, are ex officio members of these boards; but, as is the case generally with ex officio members, their influence on the several boards is not sufficient to bind the schools into a well-articulating organism.

PROPOSED REORGANIZATION OF THE PRESENT STATE SYSTEM OF ADMINISTRATION.

Even the most casual study of the Alabama school system will disclose that the functions and purposes of the many educational institutions maintained in part or in whole by the State have never been clearly defined. This has naturally led to much waste financially and to much unnecessary duplication of work. This is true of the three higher institutions and is equally true of such institutions as the district agricultural schools and the county high schools.

The great problem of Alabama is now how best to reorganize its educational business; how best to create from the many educational fragments an organization strong enough to do the work effectively and

economically and in a large, constructive way. The State department of education was created under the constitution to head the educational business of the State. The task confronting the people is how best to strengthen this central authority, how to make it more effective and efficient without depriving the people of their rights.

This reorganization can be brought about by adopting one of two plans:

- (1) By reorganizing the educational institutions in the State—elementary and higher—under one powerful State board of education, whose executive head should be an appointive State superintendent of education, or
- (2) By continuing the three boards of the University of Alabama, the Alabama Polytechnic Institute, and the Alabama Girls' Technical Institute, as at the present time; discontinuing all other boards of trustees and reorganizing their schools under a powerful State board of education, whose executive head should be an appointive State superintendent of education; and organizing a State Council of Education to serve as a clearing-house board for the boards of the university, the Polytechnic Institute, the Girls' Technical Institute, and the State board of education.

The administrative boards in charge of the State's higher institutions.—The University of Alabama and the Alabama Polytechnic Institute are controlled by separate constitutional boards, and the Alabama Girls' Technical Institute by a board of trustees organized under legislative enactment. The trustees of the university are self-perpetuating, and form, to all practical purposes, a close corporation. This form of organization has certain advantages in matters of business efficiency, but there is always a danger that a board constituted as this gradually loses the intimate relation that it should have with the people of the State, since the board members are not directly amenable to the demands of the people. To be sure, every trustee elected or reelected by the self-perpetuating board must be confirmed by the senate. The boards of trustees of the Alabama Polytechnic Institute and the Alabama Girls' Technical Institute are appointed by the governor, by and with the consent of the senate. These boards also are permanent. The members are appointed for 12 years and retire in groups in such a way that only one-third of the membership is new from time to time.

These three boards of trustees are considered in detail in later chapters. They may therefore be passed by in the present discussion. It is well, however, to reemphasize at this juncture that the function of these three boards is much alike, whether applied to the university, the Polytechnic Institute, or the Technical Institute. The survey committee is convinced that the State would be served well if all

three of these boards were merged into one central State board of education in common with the other boards of trustees maintained for other schools. However, because of certain rather fundamental differences in policy and management, endowments, etc., of the several schools, the committee believes that these three boards may as well continue as now constituted. (See Chapter XIX.)

Establishment of the State board of education.—The survey committee believes that the desired reorganization can best be brought about by establishing a State board of education and giving it full control over the elementary and secondary schools of the State, over the normal schools for white teachers, the Agricultural and Mechanical College for Negroes, the Montgomery Normal School for Negroes, schools for the deaf and blind, the Alabama Industrial School for Boys, the Industrial School for Girls, the Alabama Reform School for Juvenile Negro Law-breakers, and the State School for Feeble-minded Children (if established), and to absorb the functions of the interim State board for vocational education created by the present legislature to meet the temporary requirements of the Smith-Hughes Act, and all other boards which are now headed up in the State department of education.

This State board should primarily be a lay board representing the larger educational policies of the public; delegating the professional side of education and the administration of their general policies to the new appointive executive official, the State superintendent of schools. The board should be composed of nine members, to be appointed by the governor, by and with the advice and consent of the senate; the term of office to be 12 years; not more than three members to retire each quadrennium, thus perpetuating the board and making it permanent. Vacancies should be filled by the governor. The appointment should be for absolute worth and regardless of residence, occupation, party affiliation, religion, or sex, provided that no member be chosen from the county in which a higher institution of learning is situated. The members should serve without remuneration, except a reasonable per diem and actual traveling and other necessary expenses.

The general powers and duties of the State board of education should be:

1. To have general oversight and control of the elementary and secondary schools of the State and all other educational institutions, except the university, the Polytechnic Institute, and the Technical Institute.
2. To elect a State superintendent of schools to be the executive official of the board.
3. To act as a State vocational board to administer the Smith-Hughes Act as it applies to this State.

4. To supplant and perform all the powers and duties of the present State Normal School board, the State high-school commission, the State illiteracy commission, the State textbook commission, and all other boards and commissions now administering schools and other educational institutions in this State other than the aforesaid boards of the three higher educational institutions.

5. To require uniform records and reports, in form to be prescribed by the State superintendent of education, from all educational institutions supported by the State, and from all other organizations doing educational work and receiving State accreditation and recognition.

6. To classify and standardize, under the direction of the State superintendent, the public schools of the State.

7. To prescribe the standards and courses of study for the State normal schools, the educational departments of the denominational schools accredited under State law, and such other teacher-training institutions as may be established by law.

8. To adopt rules and regulations for the sanitary inspection of schools, and for the physical examination of school children; and in conjunction with other State authorities to see that the rules relating to school health, compulsory education, and child conservation are enforced.

9. To have general control of the schools for the deaf and the blind, the industrial schools for boys and girls, both white and colored, and the school for feeble-minded children when established.

10. To transmit to the governor an annual report, covering all the activities of the three higher State institutions of learning, and of the State department of education in its relation to all public elementary and secondary schools, and all other educational institutions under its jurisdiction.

11. To perform such other duties and functions as may be prescribed by law.

The State superintendent of education.—Under this proposed reorganization the superintendent of schools would become the executive official of the State board of education to carry out in detail the educational policies of this board. He should be appointed by the State board for professional ability and successful educational experience, regardless of residence or party affiliation. After a probational service to prove his ability, he should be reappointed for an indefinite term of years or at least for a period not less than five years. His salary should be commensurate with the importance of the office, and in keeping with what is being paid for this service in the most progressive States in which the office is appointive.

1. The State superintendent of education should be the executive official of the State board of education and executive head of the

State department of education, and should enforce all the rules and regulations made in conformity to the law by the State board for the public elementary and secondary schools and all other schools under its jurisdiction.

2. He should have supervision of all the different divisions of the State department of education and should be held responsible by the State board for the proper administration of the duties of each subdivision.

3. He should, in cooperation with the heads of the State's teacher-training institutions, and in conformity with law, prescribe courses of study for these training schools, adopt methods and standards for the certification of teachers, and for validation of teaching credentials from other States.

4. He should personally direct all other educational activities wherein the State department of education under law cooperates with the presidents and faculties of the higher institutions of the State through the State council of education.

5. He should have such other powers as under law belong to the office of superintendent of education.

The enlarged State department of education.—Figure 2 shows in a graphic manner how the enlarged State department of education should be organized. The governor represents the will of the people in appointing the State board of education. This board in turn does its work largely through its executive official, the State superintendent of education, who heads the 10 divisions of the State department of education.

The State department of education, it will be seen, is planned as 10 administrative divisions, all of which, in this State, should be organized immediately, if not already in operation. Other divisions may be added, or these reorganized from time to time as it may be deemed necessary.

(1) *The Executive Division* should have charge of the business management of the department and keep the books and records of the State board of education. The chief clerk of the department should head this division. He should also be secretary of the State board of education. The salary of the chief clerk is fixed by statute at \$1,800. The salary of so important a position should not be less than \$3,000. Because of the volume of work in this division due to the large State funds administered by the department, it needs two bookkeepers, one special examiner of accounts, and at least two stenographers, and one stenographer and file clerk—17 persons in all. The bookkeepers' salaries are also statutory, being fixed at \$1,800 each. These salaries should be increased to at least \$2,400 each. The examiner of accounts must be an expert and should supplant the present State examiners, who can not give the department of education the amount of time it requires because so many demands are

made upon them by other departments in the State government. The accountant is urgently needed to check up the State's accounts with the county boards of education and boards of other institutions

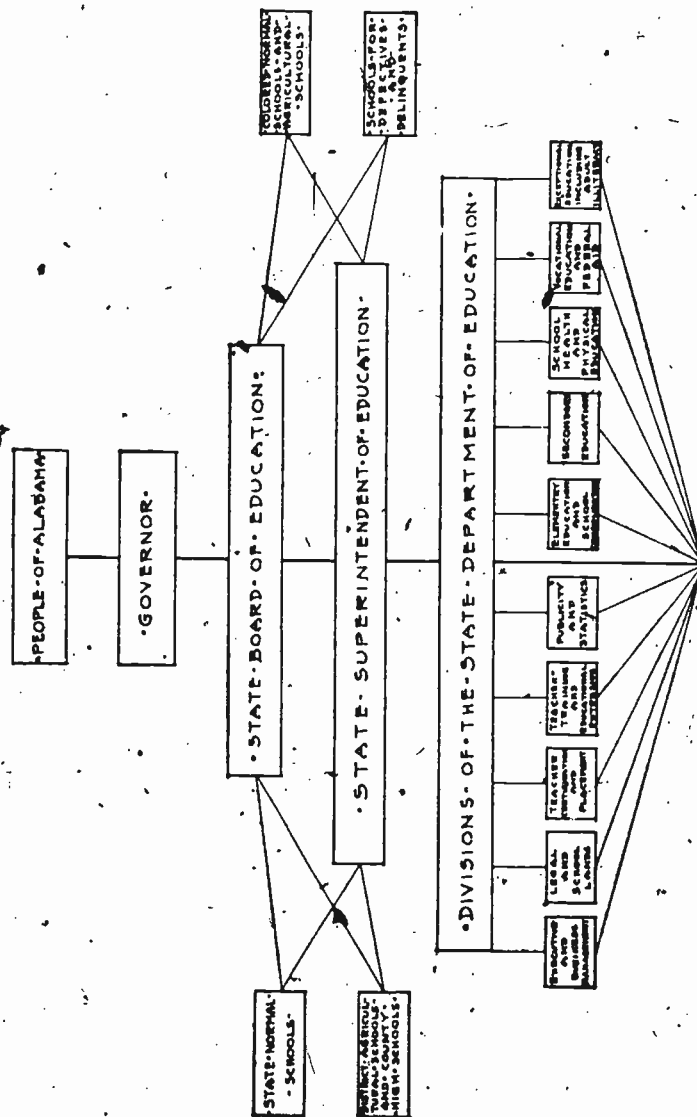


FIG. 2.—Proposed organization of the Alabama State Board of Education.

that are receiving State moneys for educational purposes. The budget of this division, including expense money for the accountant and increases for stenographers, would approximate \$15,700 per annum.

(2) *Legal and School Land's Division.* This important division should remain under the immediate direction of the superintendent, who has power, under law, to interpret the school code and decide matters of controversy arising under it. If the legislature reestablishes a permanent State school fund by absorbing the present paper fund, this division will become exceptionally important. In any case the superintendent must administer all the remnants of the school lands. The department of education should have its own appraiser of land, the value of which is at the present time largely problematical. A special land agent should be attached to this division whose duty it would be to cooperate with the State auditor and the State department of justice in clearing up the State's titles to the remaining school lands. The total budget of the division would approximate \$5,000 per annum.

(3) *Teachers' Certification and Placement Division.* The division should continue the work now in charge of the State board of examiners, and should be closely correlated in its activities with the division on Teacher-training and Educational Extension. Indeed, it would be quite feasible to place the head of the latter division in charge of the two. This division should maintain a placement bureau for teachers of this and other States desiring to find teaching positions. A small registration fee of, say, \$1 might be charged, which would in a measure defray the expenses of maintaining the bureau. One clerk should be added for this purpose. The annual budget of the division is now \$12,500. This division is self-supporting from the fees paid by teachers and requires no special appropriation from the treasury. The same would be true of the additional staff member to have charge of the placement bureau. The personnel of the division would number three board members, two permanent stenographers, and occasional clerical help for grading papers, etc.

(4) *The Division of Teacher-training and Educational Extension.* This division should direct all the teacher-training activities of the department, whether done under the head of State institute, State extension, or in cooperation with established teacher-training institutions. The State department under present arrangement directs State institutes annually in each of the 67 counties, for which four white and two colored institute instructors are required. The State department might well reorganize its county institute work and combine it with State Reading Circle work and reestablish it in cooperation with the normal schools for the purpose of aiding teachers in service to secure advanced standing in the teacher-training institutions in the State instead of, as now, for credit on certificates. (This subject is discussed in another chapter (see p. 41). The State makes an annual appropriation of \$6,500 for institutes, which is from the annual State legislative appropriation of \$350,000, to which is added examination fees paid by the teachers. The total

budget of the division for the present year was \$15,500. The State should make a straight legislative appropriation of \$15,000 a year for this division, which, in conjunction with the division on teacher's certification and placement, should be able to do an excellent piece of work in assisting to train, place, and certificate teachers.

(5) *The Division of Publicity and Statistics.* The State department would do the teachers of Alabama a great service if it were to publish a periodical dealing with educational progress in the State and Nation, and particularly keeping the teachers informed of all departmental policies, legislative rulings, etc. This division should have charge of such an organ of the department and also of the statistical and clerical work of the office. One person of good ability could do the work with odd time assistance of other members of the department. All the State's department reports, records, blanks, courses of study, and manuals should be prepared through this division. The State superintendent's estimate for printing allowance for the ensuing year is \$13,000. This is conservative. The total budget of the division would approximate \$16,000.

(6) *The Division of Elementary Schools.* This division should have charge of elementary education in the open country districts and in the towns of less than 2,000 population. It should devise means to improve the schools and through field propaganda and expert advice to county superintendents and supervisors aid in improving school work throughout the State. School consolidation should also be centered in this division, as should all school building improvement under the special "rural school buildings improvement law." Two rural school supervisors—one each for white and colored schools—are engaged in this work, but their salaries and expenses are paid by the General Education Board. The budget of this division would approximate \$1,500 per annum for stenographic work.

(7) *The Division of Secondary Education.* The State department has no one to inspect and supervise the large number of secondary schools that receive State aid. This is unfortunate. The State has the right to require high standards of efficiency from these schools in return for the large amount annually spent on the district agricultural schools and the county high schools. All State aid to secondary schools should hereafter be contingent wholly on the excellence of work done and equipment provided by the county or community for this type of State-aided schools. (See Chapter IX.) Secondary school inspection would oblige the department to add to its staff a high school supervisor. His salary ought not to be less than \$2,700, as recommended in the State superintendent's budget, with \$1,200 for expenses—a total of \$3,900.

(8) *The Division of School Health and Physical Education.* Experience in other States has proved clearly that school health and

physical education should be left entirely in the hands of the public-school teachers, as school health and physical education are educational functions. This matter is explained fully in Chapter —. Such a division should be organized without delay to enforce all legislation in regard to school health and sanitation. It should direct health inspection of school children throughout the State and direct the county school health supervisors or school nurses in their local activities. The division should also prepare plans and specifications for public school buildings to be constructed in the State. This would require the full time of one health expert and at least part time of a capable architect. The budget would approximate \$5,700 per annum.

(9) *The Division of Vocational Education.* The division should have actual charge of the work in vocational education intrusted by the State and Federal Governments to the State board of education.

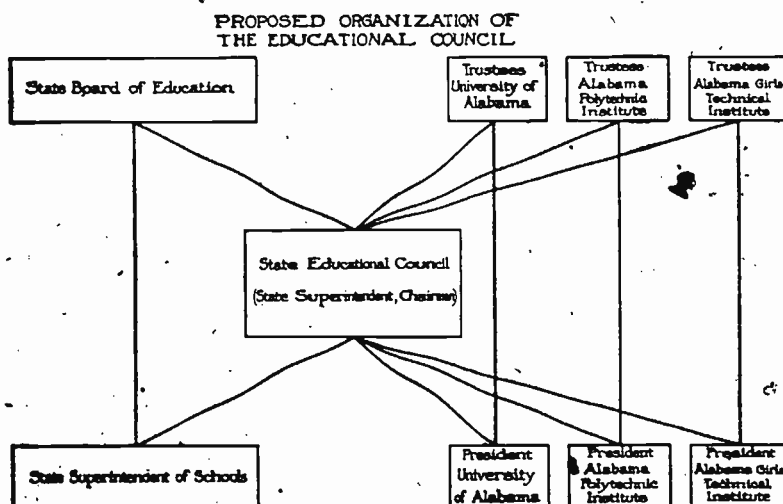


FIG. 8.

One director of vocational education would at the present time be sufficient to cover the field well.

(10) *Division of Exceptional Education.* The schools for defectives, delinquents, and feeble-minded children should be under the immediate control of the State board of education, as the functions of these schools are primarily educational. The State superintendent should have direct charge of this division, although an educational expert of high rank would be in practical charge of the educational work in the schools. The full time of two persons would probably be needed to reorganize and maintain the work in exceptional education.

The Alabama illiteracy commission should also be added to this division, at least until such times as Federal aid may be granted to supplement State funds. The State needs two organizers, one for each race, and several part-time county workers for this pressing task. The budget for salaries and expenses would amount to \$10,000 per annum. This work has heretofore been carried forward through private philanthropy, but must be taken over by the State, if illiteracy is to be blotted out.

The State Educational Council.—This, as suggested above, should be organized as a clearing-house board to have charge of and settle all educational matters of common interest to the schools directed by the State board of education, and to the schools under the three aforementioned boards of the higher educational institutions. The board might well be planned with a membership of nine persons—three representatives from the State board of education, one of whom must be the State superintendent, who shall be permanent chairman of the board; and two representatives from each of the three other boards and schools, one to be the president of each school, and the other a board member. The board would supplant the present ex officio relationships of the higher and other educational institutions of the State, and would provide them instead with a stronger board which would be able to coordinate the activities of all the schools on a more satisfactory plane than is now the case. Detailed discussion of the functions of this council appears in Chapter XX.

Recommendations for closer and more effective State administration of education.—A liberal forward-looking policy in administration of the State's school system is imperative if Alabama is to get the fullest returns for its State investment in public education. To this end the survey committee recommends:

- (1) Organization of a State board of education to have full charge and control of all public elementary schools and such other schools as are included in the discussions in this chapter, except the University of Alabama, the Alabama Polytechnic Institute, and the Alabama Girls' Technical Institute.
- (2) Appointment of the State superintendent of education by the new State board of education.
- (3) Enlargement of the powers and duties of the State superintendent and State board of education in agreement with the details set forth above.
- (4) Organization of a State council of education to consist of members from the State board of education and the State's higher institutions of learning, with powers and duties as prescribed above.
- (5) Passage of such amendments to the constitution of Alabama as may be necessary to consummate the changes prescribed above.

Chapter V.

COUNTY SUPERVISION OF SCHOOLS.

The progressive county unit act of 1915.—Few States can boast of such a satisfactory school organization and administration law as can Alabama. The year 1915 will go down as a memorable one in the educational history of the State. Then was passed the constitutional amendment providing for county and local taxation; then was also enacted the new county organization act which has at least made it possible for Alabama to reorganize its country and village schools on a sound modern business basis. The law has not yet had time to demonstrate its full value, but it has already done much toward the educational rejuvenation of Alabama's rural districts, probably more than all the legislation of several decades past. It marks the beginning of a new era for rural and village school organization in better schoolhouses and school equipment and in a better spirit of school work. Most or all of the criticisms of this law seem to arise from those who have suffered some personal loss or inconvenience by it.

Before making a closer study of the law, it is well to emphasize the more urgent reasons why schools of this and other States should supply the best possible kind of supervision in rural districts. The teachers of rural Alabama are meagerly prepared for their work and are, generally speaking, inexperienced. If teachers ever needed expert supervision, these rural teachers do. Their problems are the most serious and difficult in the whole field of education; yet they have been obliged to shift for themselves, without the help of expert supervisors. Under the old law many rural schools were scarcely ever visited. One hold-over superintendent interviewed by the survey committee confessed that he was unable even to locate all his white schools, to say nothing of the colored. Such occasional visitation as the rural schools had under the old law is of little value, particularly if the superintendent has only a limited amount of professional ability and experience to draw upon when he does make the visit.

The new rural schools must be reorganized to meet the needs of scientific agriculture. This is bound to multiply the teachers' daily tasks. The superintendents under the old régime failed utterly in readjusting the course of study to answer the occupational needs of the people, and even the new superintendents will have their hands full and will succeed but indifferently unless they are given the assistance of able subject supervisors.

COUNTY SUPERVISION OF SCHOOLS.

The old and new Alabama laws contrasted.—Alabama is one of 21 States having county or semicounty plans of school organization and administration. Prior to 1915 the State was classed as a semicounty unit State. Now it is recognized as a county unit State of purest type. The contrast of the old and the new laws is set forth so clearly and convincingly in a pamphlet recently published by the State department of education that it is reproduced here in parallel columns.¹

OLD LAWS.

PERSONNEL.

Five members, four elected by the chairman of the district trustees, the county superintendent being the fifth man.

QUALIFICATIONS.

Qualified elector of the county.

TERM OF OFFICE.

Four years, the terms of all members being contemporaneous.

GENERAL DUTIES.

To have entire control of the public schools within their respective counties, unless otherwise provided by law; to make rules and regulations for the government of the schools; to acquire, purchase, lease, receive, hold, and convey property for school purposes except where otherwise provided; to sue and contract.

SPECIFIC DUTIES.

(a) To place the county superintendent of education upon a salary basis, requiring him to give full time to the supervision of the schools.

(b) To elect a county treasurer of public school funds.

(c) (No corresponding power.)

NEW LAWS.

PERSONNEL.

Five members elected from the county at large by the legal voters, both men and women being eligible.

Good moral character, at least a fair elementary education, good reputation for honesty, business ability, public spiritedness, and interest in the good of public education.

Six years, one or two members retiring at the end of each two-year period.

To have entire control of the public schools within their respective counties, unless otherwise provided by law; to make rules and regulations for the government of the schools; to acquire, purchase, by the institution of condemnation proceedings if necessary, lease, receive, hold, and convey the title to real and personal property for school purposes except where otherwise provided by law; to sue and contract.

(a) To elect a county superintendent of education, prescribe his duties and fix his salary.

(b) To elect a county treasurer of public school funds.

(c) To elect a successor of any member whose place becomes vacant by death, resignation, or otherwise, until the next regular election.

¹ County organization and administration of schools in Alabama.

(d) To select teachers upon nomination by district trustees and to employ assistant superintendents and fix their salaries.

(e) To erect, repair, and furnish schoolhouses, fix wages of employees and have control of the public school funds of the county except as otherwise provided by law.

(f) Upon proper application, publication and notice, to rearrange the boundaries of any school district.

(g) (No authority to transport pupils at public expense.)

(h) -----

(i) -----

(j) -----

(k) -----

(d) To select upon nomination of the county superintendent of education, teachers, assistant superintendents, supervisors, and office assistants and fix their salaries.

(e) To erect, repair, and furnish schoolhouses, fix wages of employees, determine the incidental fees and have entire control of the public school funds of the county except as otherwise provided by law.

(f) To fix the boundaries of school districts and locate schools with reference to convenience, efficiency, and economy.

(g) To consolidate schools and provide for the transportation of pupils at public expense.

(h) To appoint from one to three trustees for each school.

(i) To enforce compulsory attendance as required by law.

(j) To dismiss the county superintendent or any other employee for cause or when in the opinion of the board the best interests of the schools require it.

(k) To provide for taking the school census.

REMUNERATION.

Two dollars a day for each day's work, for not more than ten days in any one year.

Actual travelling and hotel expenses incurred in attending meetings of the board for not more than 12 meetings in any one year.

SALARIES OF COUNTY SUPERINTENDENTS.

Four per centum of funds disbursed, not to exceed \$1,800 from State funds per annum, or salary of not less than \$1,000 a year.

Salary of not less than \$1,000 a year.

The strong points in the law.—The new law contains many strong points which are readily apparent to unprejudiced people. The most important are these:

1. The new county boards are elected by the direct vote of the qualified voters of the county, and therefore represent the electors directly instead of, as formerly, the district trustees only.

2. The new county boards are permanent and their service is continuous. This was impossible under the old law because the terms of all the members expired at one and the same time.

3. The new boards are free from the domination of self-seeking county superintendents, who, as members of the old boards, had the power to assist in fixing their own salaries.

4. The new board is elected from over the county at large and not from commissioner districts. Under this method it is possible to make the selection from among the very ablest men of the entire county. It tends to eliminate selfish interests, which were liable to develop under the old plan, in the more local commissioner districts.

5. The new board is free to equalize the educational advantages of all the county to the needs of all the people in the county. Thus local bickerings are disappearing.

6. The board now appoints the county superintendent regardless of residence, religious creed, political adherence, or sex. This is one of the strongest points in the law—the best fitted person gets the position.

7. The county board is now directly accountable to the people who elect them instead of to the local trustees as heretofore.

8. Under the new law the most important educational powers and duties are centered in the county board and its executive official, the county superintendent, because experience has demonstrated conclusively that the local boards of trustees are generally unfit, both by training and experience, to administer the important educational affairs of the schools.

9. The new organization is democratic—if democracy stands for the greatest degree of individual freedom compatible with the best interests of the majority of the people. It is just as democratic as the efficient policy pursued in Alabama cities in selecting city superintendents or in appointing county health officials or county surveyors or other similar specialists, of whose qualifications the general electorate is unable to judge.

Some reasons why the old law was superseded.—Alabama wisely abandoned the old system because it had failed to give its rural population the kind of public-school education that is demanded in every forward-looking agricultural State. Under the old system the two outstanding obstacles to good business management and educational efficiency were the political county superintendent and the large authority of the local board of trustees. A study of the latter has disclosed that:

1. *The local district boards of trustees were ineffective and impracticable.*—The State had approximately 6,000 such boards under the old law, each in charge of the three trustees. This made a small army of approximately 18,000 members in the State. An average county had about 260 trustees. Such an organization was inexcusable in any way one might consider it. It is unreasonable to expect that

in an ordinary county 260 men could be found suited by temperament and training to fill all these positions and willing to give this time to the duties of the office. Even if the men could have been found, there was neither business reason nor educational reason for bringing such a large force into the management of the schools.

2. *The board members often misdirected their efforts.*—Many board members gave their time freely to the schools and in some instances to good purposes, but generally their efforts were misdirected, because they lacked knowledge of educational needs.

3. *Selection of teachers.*—Teachers were chosen by the local boards, who did much as they pleased in these matters. Some counties which had superintendents of exceptional personality, it is true, allowed these educators a free hand in placing teachers; but this condition was, unfortunately, exceptional. The prevailing practice of selecting teachers by local boards has led to serious abuses which need not be mentioned here. Suffice it to reassert that the average school board in rural districts has been unable to choose teachers wisely. Small districts were unable to meet modern community needs. The small one-teacher district did not have within its boundaries what was necessary to make a modern community school. The small schools have been devoting their energies to the "tool subjects" almost exclusively. Few pupils completed the prescribed course of study. The schools were not organized to attract and hold the larger boys and girls, and most of the schools were unable to provide the social aspects required of modern education. The small, one-teacher district has unquestionably been responsible for the following fundamental weaknesses, from which all the schools in the State are suffering: Nonattendance of a large per cent of the school population, irregularity of attendance, and great wastage in attendance due to lack of interest in prescribed school work.

The county unit of organization in other States.—Twenty-one States are organized wholly or in part on the county-unit basis for school administration. Of these, Alabama, Florida, Georgia, Kentucky, Louisiana, Maryland, New Mexico, North Carolina, Tennessee, and Utah may be classed as of the pure county type; that is, in which practically the entire management of the schools rests with the county board of education. Arizona, California, Delaware, South Carolina, Texas, Virginia, and Washington belong to the mixed or semicounty type, in which the authority is divided between the county board and township or local district boards. Of the above States, Kentucky, Tennessee, Utah, and New Mexico have recently changed from the district unit of organization to the county unit, and Ohio and Texas from the district unit to the semicounty organization. The most recent State to reorganize on the new plan is New Mexico; whose

State superintendent reenforces the faith that Alabama leaders have in the system when he says:

We now have the county board of education which has charge of all the schools in the county. This is a wise provision, as it centralizes the administration of the county schools. It has already stopped all financial leaks, and better qualified teachers are being employed. It is a great deal more economical than the old system, as all counties are required to work under the budget system.

It is generally conceded that satisfactory progress in school consolidation, in the establishment of rural high schools and the introduction of practical agriculture, home economics, and other industrial work of value is in many States chiefly due to the new business-like county unit organization. Utah may be taken as an illustration. Since the State has been organized on the county unit system all the small schools, except 40, have been consolidated. This small group remaining is scattered over the edge of the desert. A well-planned system of county supervision by assistant superintendents and subject supervisors has supplanted the old inspectorial methods with close effective schoolroom supervision.

Who the county board members are.—A careful study of the personnel of the county boards of education has convinced the survey committee that in most of the counties of Alabama, strong, capable persons are now being chosen for the important task of reorganizing the schools. Exceptions to this rule are in counties where the people do not yet seem to appreciate their new prerogative and have permitted the elections to go by default to members of the old régime, who in turn have retained in office the former county superintendents regardless of their ability and qualifications.

The county boards usually comprise prominent farmers, bankers, lawyers, merchants, and other professional and business men who have the interests of the schools at heart and are willing to devote their time to the upbuilding of education in their own county. In Montgomery County, by way of illustration, the chairman of the board is a wholesale hardware merchant; the other members including a leading dry goods merchant, an abstractor and capitalist, and two prominent farmers. These five men and their executive official, the county superintendent, are in the midst of a school reorganization that bids fair to reconstruct the whole system of county schools in Montgomery County during the next six years. (See Chapter V.)

The qualifications for membership on county boards of education as fixed by law are none too high, but it would probably be unwise to make any changes in them at the present time. The county superintendents, in a questionnaire sent them by the survey committee, were asked "Are the present qualifications for membership on the county board of education satisfactory?" It is quite significant

that 43 superintendents answered in the affirmative, 2 only in the negative, and 22 made no answer whatever. A large majority of superintendents seem to be satisfied with the qualifications of their administrative boards. It is interesting in this connection to know that when asked in regard to the requirements for their own qualifications only 19 county superintendents held these to be satisfactory, 47 believed they should be increased, and 1 failed to answer.

Who the Alabama county superintendents are.—The personnel of county superintendents compares favorably with that of other States. The superintendents are better paid than in many States and the tendency is to supply the much needed supervisory and clerical help. This could not have been said a few years ago. Forty-four new superintendents have come into office since the act of 1915 went into effect. A number of hold-over superintendents are likewise well qualified for the office they hold. Many of the superintendents were interviewed by the survey staff, five members of which spent much time in study of rural and village schools, accompanied by the county superintendents.

The following detailed tabulation was compiled from questionnaires answered by each of the county superintendents of the State:

COUNTY SUPERVISION OF SCHOOLS.

TABLE 1.—County superintendents, assistants, salaries, and preparation—PART I.

Counties.	Length of serv-ice of present incumbent.	Number of assistants.		County budget.							Preparation and experience, in years. ¹						
				Super-visors.	Clerks.	Salary of super-intend-ent.	Salary of super-visors.	Salary of clerks.	Travel-ing ex-penses.	Miscel-laneous.	Total.	Academic.			Professional.		Experience.
												Sec-ondary school.	College or uni-versity.	Degrees.	Normal school.	Sum-mer school, weeks.		Rural school, village, city.
Adams	14	1	0	\$1,000	\$200	\$600		\$500	\$2,600	4		A. B.	2	12	3	12	
Adair	14	2	1	2,500	300	400			3,600	4	3	A. B.	0	12	3	6	
Barber	14	1	1	2,000				100	2,500	4	3	A. B.	0	6	3	7	
Bibb	14			1,200			\$250	300	1,500	3	3		0	6	3	1	
Bloom	14	1	1	2,100		150		100	2,200	2	2		0	6	3	3	
Bolivar	14	2		2,150	500			750	2,900		6	A. B.	0			3	
Boss	14			2,000				450	150	2,600	1	4	A. B.	1	24		11
Butler	18			2,400		1,000			3,400	2	2		5	6		34	
Calhoun	14	1	1	1,800	500	300			2,250	3	3	A. B.	2	12	0	3	
Camden	14			1,200		300			1,575	3						3	
Carroll	6			1,500				175	1,675	1	1		2	6	8	10	
Cass	1	1	1	1,600				150	1,750		4	A. B.	4	18	4	10	
Castro	2	1	1	1,500				300	2,000	1	1		3	20	2	10	
Cherokee	6			1,000		240			1,500		2		3	6	14	10	
Chickasaw	2	1	1	2,100			200	90	3,500		3		3	6	2	6	
Chickney	1	2	1	3,000	300			1,400	4,400	3	2	B. A.	6		13	13	
Cibola	1			1,500					2,400	2			4	6		11	
Cimarron	2	1	1	1,500				400	1,900		3		3	6	7	61	
Cotton	14			1,800		150			1,950		4	A. B.	21	12	7	61	
Crawford	2	1	1	1,800		200			2,000		2		6	17		17	
Creek	6			1,500	600				3,000	2	2		3	12	7	13	
Crittenden	14	2	1	1,600					1,680	2	2		3	12	7	13	
Cross	6			1,600					1,600		4	A. M.			43	43	
Custer	17	2		2,400	650			2,300	6,500		3		2	0	6	6	
Dallas	14			2,400	210				1,800		3		3	6	7	2	
Dawson	10	1	1	1,200		600	400		2,600	4	3	B. S.	18	18	7	7	
DeKalb	2			1,600		900		21	3,063		3		3	12	3	8	
Dickens	14			2,250				400	2,500							13	
Dodd	14			2,100					2,100							13	

¹ The superintendent in Coos County had attended a school of education one year.

² No professional degree reported.

TABLE 1.—County superintendents, assistants, salaries, and preparation—PART I—Continued.

Counties.	Length of service of present incumbent.	Number of assistants.		County budget.						Preparation and experience, in years.						
		Super. visors.	Clerks.	Salary of super. intendant.	Salary of super. visors.	Salary of clerks.	Traveling ex- penses.	Miscel- laneous.	Total.	Academic.		Professional.		Experience.		
										Sec- ondary school.	College or uni- versity.	Degrees.	Normal school.	Sum- mer school, weeks.	Rural and village.	Town and city.
Frederic.	1			\$1,500				\$300	\$2,210	1	2		4	12	15	4
Franklin.	1			1,500					1,800	6			1		22	
Geneva.	1		1	1,500				500	2,600					6	17	14
Greene.	16	1		1,000	\$200				1,300	6				2	20	
Hale.	1	1		2,000	330			400	2,050	3	2			24	2	4
Henry.	1			1,800					1,886	4	2				2	6
Jefferson.	5			1,200				100	1,310	3					18	
Madison.	1		1	1,500		\$440		600	2,540	2	4			2	12	10
Manassas.	2	15		5,000	22,260	4,040		300	37,050	2				3	6	4
Marion.	2		1	1,200				300	2,000	1				3	4	4
Marshall.	5	1		2,600	1,000	900		600	3,500	2				36	8	26
Middle.	1		1	2,000	240	480			2,730	3						
Monroe.	6			1,800					1,800	2	3					
Montgomery.	1		1	1,600		300			1,960	3						
Morgan.	6	2		2,000	700				3,500	2						8
Perry.	6		1	4,000		1,100			5,400							18
Pike.	13			2,200					2,373		3			3	15	1
Potomac.	2			1,500					1,545	3				2	36	14
Prince Georges.	1			1,800					1,950	2				1	12	7
Stafford.	1			1,800					1,800	4						
Stafford.	18	5	2	3,300	6,000	2,730		600	11,450		3					10
Stafford.	1			2,400					3,000	4				4	45	11
Stafford.	1			5,000	2,200	1,020			8,420	4						2
Stafford.	1	2	1	1,600					1,600		4					10
Stafford.	7			2,000					2,100	4				6	16	
Stafford.	1		1	2,000	00				3,150	4	5				1	4
Stafford.	12			2,400					3,150	1				8	5	1

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1. No professional degrees reported.

TABLE 1.—County superintendents, assistants, salaries, and preparation—PART II.

County.	Held office prior to 1915.		How has law of 1915 affected the school?		Are present qualifications for membership on board of education satisfactory?		Are qualifications for county superintendent high enough?		If not, what should be required?		Is clerical and supervisory force adequate?		How many visits to each teacher annually?	Is salary sufficient for your needs?		If not, what should it be to make the office worth while?	What additional constructive work has superintendent accomplished?
	Yes.	No.	Favorably.	Unfavorably.	Yes.	No.	Yes.	No.			Yes.	No.		Yes.	No.		
Autauga		X	X		X		X	X	Normal school training.			X	2		X	\$800	Club work.
Baldwin		X	X					X	5 years' experience.			X	2		X	500	Not much.
Barbour		X	X		X		X	X	Normal school training.			X	3		X	400	Community building.
Bibb		X	X									X	1		X	800	Club work.
Blount		X	X		X		X	X	College graduation.			X	1		X	(1)	None.
Bullock		X	X									X	2		X		Built one school, repaired, war work.
Butler		X	X		X		X	X				X	3		X	550	Suggestions in agriculture and manual training.
Calhoun	X		X		X		X	X	Normal course.			X	1		X		Community gatherings.
Chambers	X		X						Normal and first grade.			X	2		X	700	Cooperation with farm demonstration agent.
Cherokee		X	X									X	1		X	300	None.
Chilton	X		X						Normal course.			X	2		X	\$306	General work.
Chocoma		X	X		X		X	X	Normal and experience.			X	1		X	200	None.
Clarke		X	X		X		X	X	Special training.			X	2		X	900	General work.
Clay		X	X									X	1		X	800	None.
Clayborne		X	X		X		X	X				X	1		X	500	Do.
Coffee		X	X		X		X	X	First grade.			X	2		X	900	War work.
Colbert		X	X		X		X	X	Special training.			X	4		X	600	Community work.
Concord		X	X		X		X	X	Normal diploma.			X	4		X	1,500	Supervision of building.
Coosa		X	X		X		X	X	Normal training.			X	5		X	500	Club work.
Covington		X	X		X		X	X	Normal course.			X	4		X	700	Very little.
Crenshaw		X	X									X	2		X		Consolidation and community work.
Cullman		X	X		X		X	X				X	7		X		Community activities.
Dale	X		X		X		X	X	Normal course.			X	3		X		Repair work, new buildings.
Dallas		X	X						First grade.			X	3		X	600	900
De Kalb		X	X		X		X	X	do.			X	3		X	750	Building and consolidation.
Elmore		X	X		X		X	X	Special training.			X	3		X	900	Club work and building new schools.
Escambia		X	X		X		X	X	Normal school training.			X	1		X		
Etowah		X	X		X		X	X				X	1		X		

Expenses paid.

A careful study of the table will disclose that with few exceptions¹ the hold-over superintendents are the poorest paid, have the least supervisory and clerical help, and work on the meagerest annual budgets. This becomes more significant when it is known that of the 24 superintendents who hold academic or professional degrees only 5 hold-over superintendents hold such degrees.

Great importance of the superintendency requires superior educational qualifications and successful experience.—Educators are generally agreed now that the rural schools can be made into satisfactory educational institutions for America's rural population, (1) through organization into community schools of the consolidated or one-teacher type (see Chapter VII), (2) through close professional supervision. Both of these are possible under the new organization. The old-time superintendent was looked upon as little more than a functionary whose business it was to visit schools, make statistical reports, and help out in occasional teachers' institutes. Not so now. The superintendent is the professional representative of the county board in its important tasks in financing, organizing, and rebuilding schools, in selecting teachers and in directing these teachers in classroom and community activities. He should be an agricultural expert, a general rural life expert, understanding and sympathizing with the needs of modern rural life. No person of meager academic and professional preparation and limited experience can fill this important office satisfactorily.

In general the county superintendent should be a person of unlimited energy, be a good mixer, and have the tact to get along with people. He should have foresight and imagination to see and plan progressive things for the schools. He should have good knowledge of men and women "and the ability to compel willing and loyal support from them."

In a specific way the Alabama county superintendents should be required to possess academic and professional education at least equivalent to graduation from the standard normal schools of the State and to have had three years' successful experience in teaching (the higher the standard of qualification the better). He should also hold a county superintendent's professional certificate issued by the State department of education and based on (1) general education, (2) known administrative ability, (3) known supervisory success, (4) general personality and force of character, (5) general professional spirit. This would give the county boards of education a definite basis on which to act when they are called upon to select the superintendent.

¹Mobile County is a hold-over county which should not be considered in this category as it had the equivalent of a county unit organization for many years before 1915, having been organized under special legislative enactment. Because of this organization it has long been the "model county" of the State.

An effective county school organization.—Whether it be in Alabama or in some other State, the county school organization, to be thoroughly effective, must make provision for a well centralized business administration without depriving the people of their local initiative in school matters. The county board and the county superintendent should administer the general school affairs and equalize educational advantages to all the people of the county, expending the school funds of the county for the general maintenance of all the schools. Each school community or school district should be represented by at least one local trustee appointed by the county board of education or elected by the legal voters of the district, with the provision that all incorporated towns and cities above 1,000 population shall select their own local boards of education, and have the right both to levy taxes and to issue bonds for extraordinary school purposes, such as acquiring additional land sites, erecting new buildings, etc. This is a guaranty of local autonomy and local interest.

Figure 4 shows what the "amplified" Alabama county organization should be for educational efficiency. The county board of education should not put all the burden of administration on the shoulders of the county superintendent and his professional staff. The board ought to be on intimate terms with the local trustees (who under the present law have been ignored in some counties), with the attendance officer (who has an important function in the school system), with the county board of health, and with the county school nurse or director of school health, which latter official is indispensable in a well-planned county system; and through these persons the county boards must be on terms of acquaintanceship with the parents and homes in the county.

However, the board of education should never undertake details of administration which belong to the superintendent and his assistants. The county superintendent, finally, must be supplied with a staff of assistant superintendents and subject supervisors, in order to give his schools real supervision. These supervisors, like the county superintendent, should have professional qualifications and teaching gifts commensurate with the importance of their positions.

Reorganization for closer and more effective county supervision.—Good beginnings have been planned for expert school organization and supervision of the rural and village schools in Alabama. It is imperative to strengthen and enlarge these beginnings; to this end the survey committee recommends:

1. Requirement that all candidates for county superintendent, not including the present incumbents, shall have minimum academic and professional qualifications equivalent to graduation from the standard (class A) normal schools of the State, and at least three years' successful experience as teacher or supervisor in this or other States, and

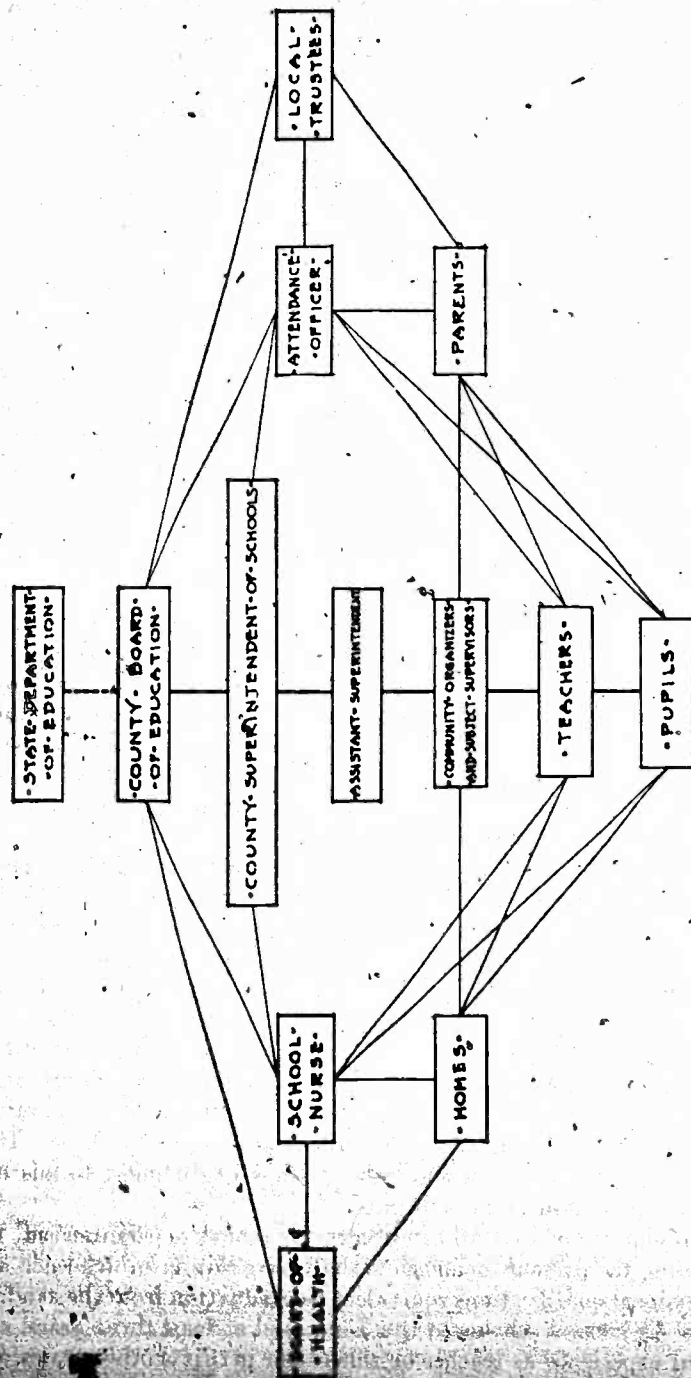


FIG. 4.—Proposed enlargement of the county board of education in Alabama.

hold, at the time of the appointment to office, a professional county superintendent's certificate issued by the State department of education on the basis of the foregoing qualifications, and ample evidence that the candidate (1) is an able administrator, (2) is of strong personality and good character, (3) has exceptional professional spirit.

2. Requirement that no person shall hereafter be appointed as assistant superintendent or subject supervisor who does not hold a State professional certificate valid in Alabama.

3. Appointment of an assistant county superintendent in each county employing 100 or more teachers, and a subject supervisor in each county for every 50 teachers or fraction thereof.

4. Maintenance of high standards among the county superintendents and their assistants—

(a) By holding an annual "school" of one week's duration under charge of the State superintendent for all the county superintendents, this provision to be made mandatory and all traveling and living expenses to be defrayed from county educational funds.

(b) By granting county superintendents and their assistants leave at full pay to attend summer school every second or third year.

(c) By furnishing at State expense each county superintendent for his own use, or the use of his assistants, one-half dozen or more of the leading educational books of the year.

5. Amendment of the present county board law to provide that all incorporated towns and cities above 1,000 population shall select their own local boards of education, and be authorized to issue bonds for extraordinary purposes, such as acquiring additional land sites, erecting new buildings, etc., in addition to the right of levying the present three-mill district tax.

Chapter VI.

SCHOOL POPULATION, ENROLLMENT, AND ATTENDANCE.

Effectiveness of a school system determined by how fully it is utilized.—The effectiveness of a school system can be determined to a large extent by the degree to which it is utilized by the public. If the system is well organized and carefully administered and supervised, a large proportion of the school population may be expected to enroll. If the teachers in charge are well prepared and have the ability to sustain good interest in school work, and the course of study is well adapted to community needs, a good per cent of the enrollment will be in daily attendance; but if on the other hand the people of the State fail to make full use of the schools established for their children, as indicated by a low rate of enrollment and irregular attendance, it is reasonable to assume that the schools have failed to attract and hold the children and their parents, because they have failed to provide the type of education required by that particular community.

On this basis it will appear that the State of Alabama ranks low in sustained school interest; and, considering the small number of children making daily use of them, the schools cost the State high. Poor schools are always expensive schools.

The school population.—The total school population of Alabama is (in 1918) 769,808, which embraces all persons over 7 and under 21 years of age. Of this number, 454,478 are white and 315,430 colored. It appears, however, that many Alabama children enter school at 6 years of age and some at 5; but very few remain in the elementary or secondary schools beyond 18 years of age. Normally, children should enter school when they have finished their sixth year and they should complete the twelfth year—the last year of high school—in their eighteenth year. In Alabama the public school course is intended to cover only 11 years. Children entering at the legal age of 7 should graduate at 18. The normal school age in a large majority of the States is 6 to 18, inclusive, and should be made so for Alabama.

The State makes provision for a biennial school census; the last census was taken in 1918. Figure 5 tells in a graphic manner the increase and decrease in school population by races. The white school population is seen to have grown steadily from about 390,000 in 1910 to about 454,000 in 1918. This indicates a healthy growth in white



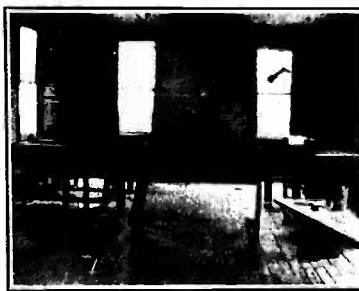
A. A NEGRO SCHOOL IN ONE OF THE LARGER ALABAMA TOWNS.



B. MOBILE COUNTY TRAINING SCHOOL FOR NEGROES.



A. A dilapidated school building with home-made furniture, in Montgomery County.



B. A badly lighted and badly furnished schoolroom.



C. These homemade desks and benches are the entire equipment of this school.



D. This outbuilding serves the school of an aristocratic suburban community.



E. There can not be much inspiration in teaching such a four-grade school as this.



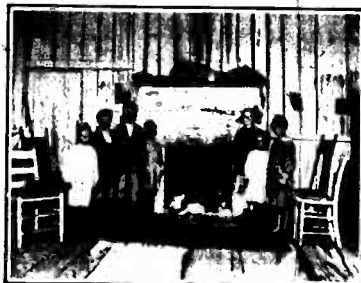
F. Five grades in this small school.



A. An antiquated school interior.



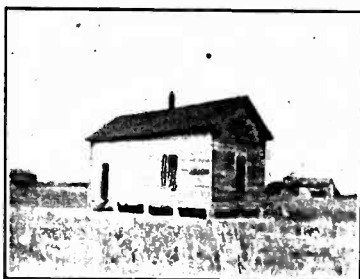
B. Attractive white children in a ramshackle school building.



C. An old cabin used for a school.



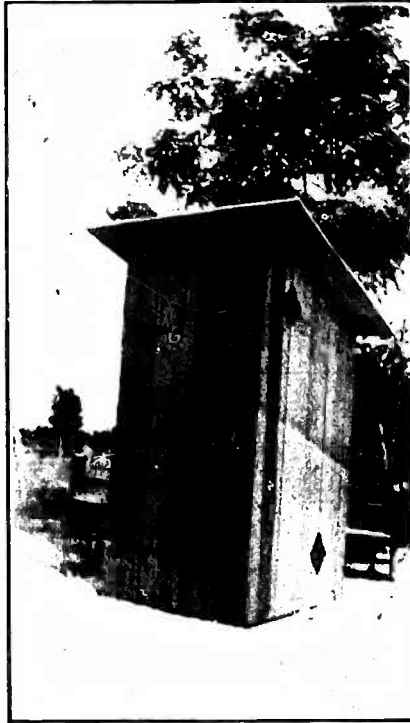
D. Note the seating of these children.



E. Typical of the poorer kind of school.



F. This schoolhouse was a Negro cabin.



A. A BETTER TYPE OF OUTDOOR TOILET IN ESCAMBIA COUNTY.



B. OPEN STOCK WELL SUPPLYING A NEAR-BY RURAL SCHOOL.

population as a whole. The broken line, for colored children, tells a different story. Up to 1914 the colored school population grew

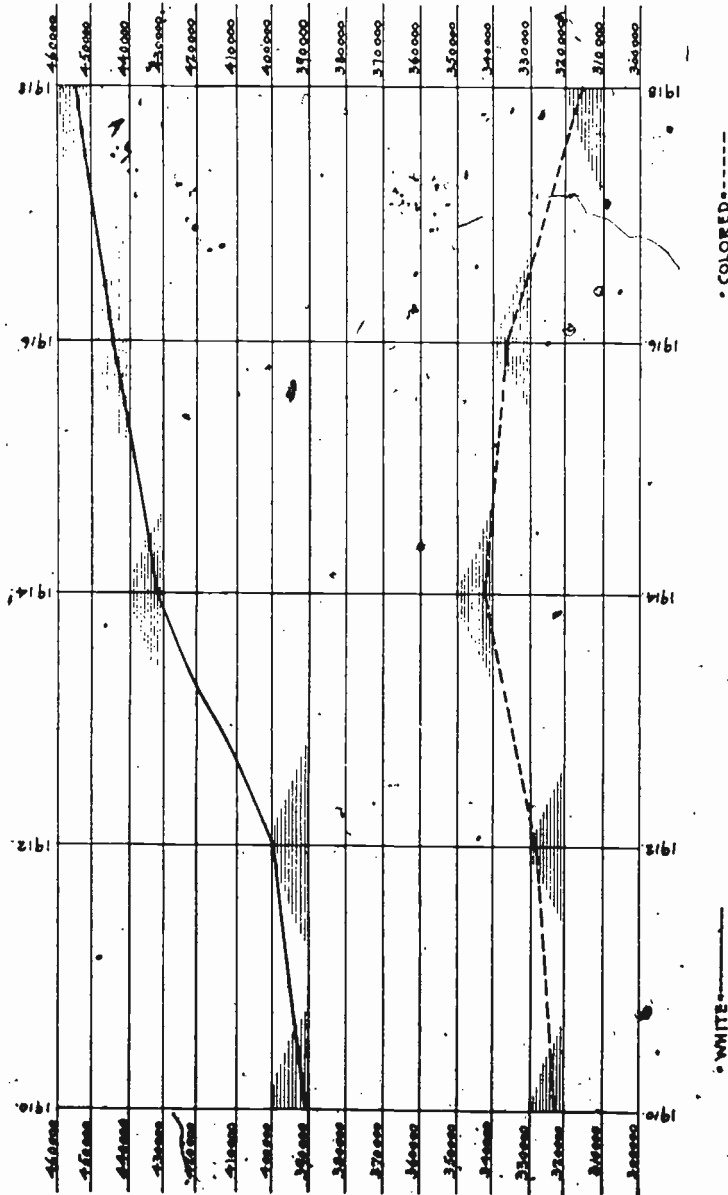
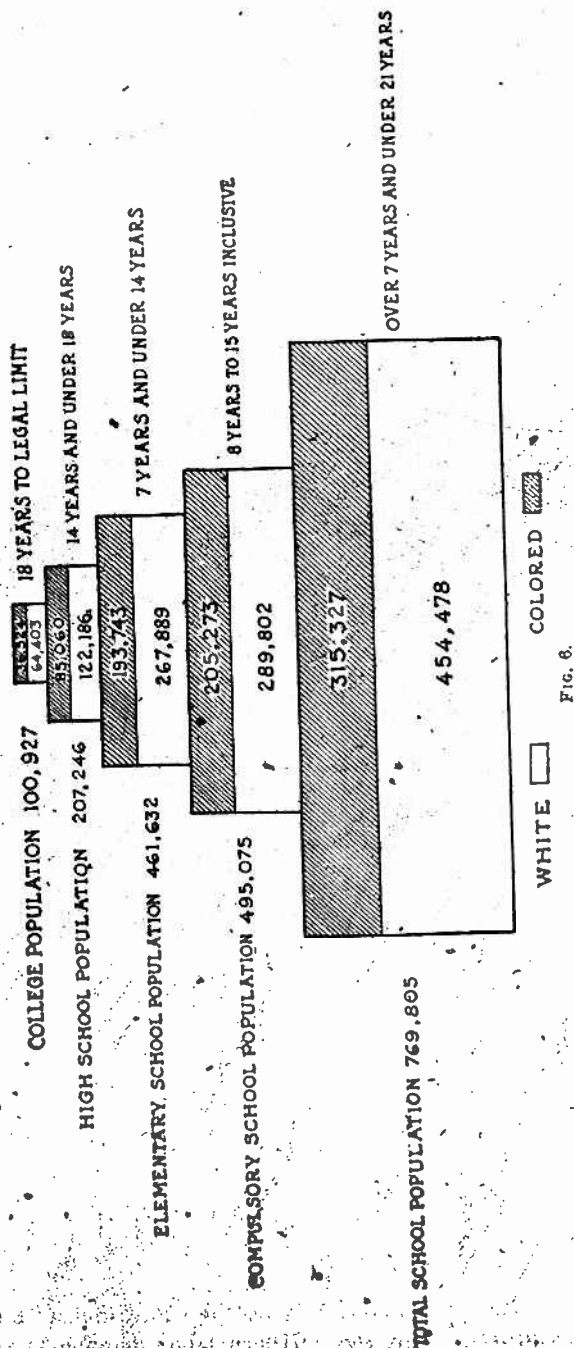


FIG. 5.—Ebb and flow in school population by race.

steadily, although not so rapidly as the white; but with the outbreak of the European war, the northern labor demands began to draw

SCHOOL POPULATION OF ALABAMA FOR THE YEAR 1918.



many colored families from the State. Then, in 1916, unprecedented floods swept the State and the boll weevil added to the disaster. These helped to swell the northward movement to the dimensions of a real migration. The last four years have probably reduced the colored population by 100,000 persons, including a school population of about 37,000.

Figure 6 gives this school population and divides it as compulsory attendance population, and elementary, secondary, and college population. This graph also contains the total school population on which the State bases its school apportionment—a thing that is clearly unfair, since many of the persons included as “school population” are well past their school life, already having taken upon themselves life responsibilities as married people.

Figure 7 is based on the total school population in figure 6 and shows strikingly how very few children of school age actually make

LOSSES UP THROUGH THE SCHOOL SYSTEM 1918.

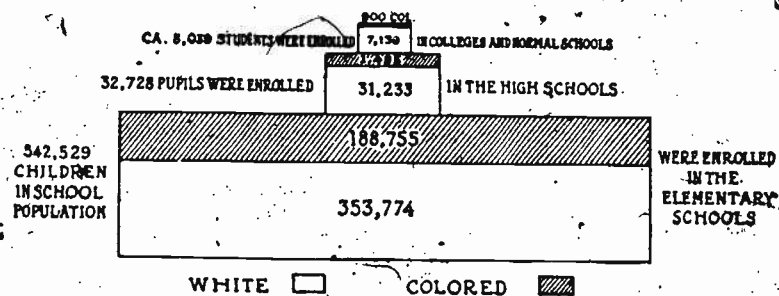


FIG. 7.

use of the schools provided by the State, and particularly how few children complete the elementary school and advance to high school and college. In a total census of 769,807 children in 1918, only 542,529 children are enrolled in elementary schools. Of this number 32,728 are in high school, and 8,039 in college and normal school. Of the persons who enter the higher institutions of learning, only a very small per cent finally graduate from college.

Percentage of school population.—Alabama ranks forty-third among the 48 States on the basis of school enrollment. This graph is based on 1915-16 statistics (the last available information for the whole country). It gives Alabama's public school enrollment at 69.1 per cent. The State returns for 1918 would increase this to 70 per cent, but the returns from several of the more backward counties are so obviously inaccurate (see Table 2) that it was found advisable to use, in place of them, figures for 1917, as

* This includes pupils attending district agricultural schools and county high schools.

indicated in the table. Alabama, accordingly, remains in forty-third place, with an enrollment of only 69 per cent of the school population, New Mexico, with its abnormally large Spanish-American population, and Louisiana, with its Creole element, alone, taking a lower rank.

Table 2 is a striking illustration of how the different counties vary in school interest, as judged by school enrollment and school attendance. For example, while certain counties have upward of 85 per cent of school population enrolled, others drop as low as 41 per cent. This indicates a very serious condition of educational indifference, for which county boards of education and county superintendents are largely responsible. It is not right to permit any county to neglect its evident duty, as has been the case with a large number of counties, as seen in Table 2. On the basis of total school population, the enrollment in one county is only 17 per cent of the total school population, and in another instance only 20 per cent of the school population. In the former case, only 1,671 children in a total school population of 9,319, and in the latter 2,676 children in a total of 12,039, are in daily attendance. To complete an elementary school course of 7 or 8 years is not too much to be expected of any citizen, but for a county deliberately to neglect to enforce the first essential in democracy, i. e., the State's educational needs, is little short of criminal. It was President James Madison who said, "A popular government without public education is but the prelude to a farce or tragedy, or both."

TABLE 2.—School population, enrollment, and attendance by counties, 1918.

Counties.	Total school population, 1918.	Enrolled in public schools.		Average attendance in public schools.		Attendance on basis of school population.	
		Number.	Per cent.	Number.	Per cent of enrollment.	Per cent.	Rank.
Autauga.....	6,824	3,855	56	2,368	61	34	58
Baldwin.....	6,915	3,139	74	3,003	86	43	39
Barbour.....	12,028	6,403	53	3,004	56	30	63
Bibb.....	7,737	5,878	76	3,479	59	45	32
Blount.....	8,964	7,247	81	3,171	71	58	6
Bullock.....	11,071	5,312	48	3,386	64	31	61
Butler.....	10,065	7,070	70	3,349	70	53	11
Calhoun.....	16,919	9,978	60	3,305	63	32	60
Chambers.....	14,592	9,844	67	3,856	70	47	22
Cherokee.....	7,218	5,516	76	3,108	56	43	40
Chilton.....	7,635	6,100	80	4,600	75	60	4
Choctaw.....	7,080	4,966	70	3,401	68	48	20
Clarke.....	9,480	5,604	59	4,175	74	44	36
Clay.....	7,726	6,361	82	3,291	52	43	41
Cleburne.....	4,654	3,912	84	2,122	54	46	35
Coffee.....	10,480	7,743	74	4,846	63	46	26
Colbert.....	10,038	6,920	69	3,932	57	39	48
Concord.....	8,408	6,705	80	4,481	66	53	12
Cook.....	5,127	4,345	85	3,340	77	65	1
Covington.....	11,373	9,946	84	5,573	56	47	23
Crenshaw.....	8,336	5,726	69	3,371	57	39	49
Cullman.....	11,333	9,204	81	4,276	68	55	9
Dale.....	7,903	5,326	67	4,066	77	51	14
Dallas.....	26,028	9,374	36	3,966	74	39	50

SCHOOL POPULATION AND ATTENDANCE.

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TABLE 2.—School population, enrollment, and attendance, etc.—Continued.

Counties.	Total school population, 1918.	Enrolled in public schools.		Average attendance in public schools.		Attendance on basis of school population.	
		Number.	Per cent.	Number.	Per cent of enrollment.	Per cent.	Rank.
De Kalb.....	11,835	9,130	77	5,152	56	44	37
Elmore.....	9,900	6,810	69	4,281	63	43	42
Escambia.....	8,058	6,044	75	3,649	60	45	33
Etowah.....	14,263	11,901	79	5,625	50	39	51
Fayette.....	5,957	5,525	100	2,667	67	62	2
Franklin.....	7,201	6,244	73	3,638	70	51	15
Geneva.....	9,778	9,677	100	4,678	48	48	21
Greene.....	5,607	2,228	40	2,065	92	37	54
Hale.....	9,324	5,064	54	2,878	57	31	62
Henry.....	7,051	4,858	69	2,732	56	39	52
Houston.....	11,155	10,590	178	6,238	58	56	8
Jackson.....	11,856	8,348	70	4,823	58	41	47
Jefferson.....	89,654	59,711	67	28,870	65	43	43
Lamar.....	6,507	5,953	107	3,437	58	53	13
Lauderdale.....	14,516	10,575	72	7,453	70	51	16
Lawrence.....	7,827	6,177	79	3,590	58	46	27
Lee.....	10,771	6,200	58	3,877	63	36	56
Limestone.....	10,373	7,555	73	4,592	61	44	38
Lowndes.....	9,806	4,680	48	3,375	72	34	60
Macon.....	8,649	5,721	66	3,321	58	38	53
Madison.....	15,522	12,142	77	7,822	64	50	17
Marengo.....	12,360	5,895	48	3,768	64	30	64
Marion.....	7,503	6,961	101	4,499	65	60	5
Marshall.....	11,249	9,161	81	5,157	56	46	28
Mobile.....	23,033	15,334	67	10,344	67	45	34
Monroe.....	9,430	6,883	73	4,451	65	47	29
Montgomery.....	27,219	15,781	58	10,060	63	37	55
Morgan.....	12,057	9,364	78	6,048	65	50	18
Perry.....	9,310	6,055	65	4,028	67	43	44
Pickens.....	9,350	7,544	81	3,277	43	35	57
Pike.....	10,454	9,213	88	4,833	51	46	29
Randolph.....	9,627	8,156	85	5,478	67	57	7
Russell.....	9,319	2,500	28	1,671	64	17	67
Shelby.....	8,590	6,836	80	5,307	78	62	3
St. Clair.....	8,203	6,776	83	3,700	55	46	30
Sumter.....	12,039	4,227	32	2,676	63	20	66
Talladega.....	12,694	10,771	85	5,840	54	46	31
Tallapoosa.....	10,230	10,187	79	4,427	44	43	45
Tuscaloosa.....	16,024	12,267	77	8,816	72	55	10
Walker.....	14,278	12,983	179	6,973	54	49	19
Washington.....	5,065	3,616	71	2,115	59	42	46
Wilcox.....	10,845	4,482	41	2,763	62	26	65
Winston.....	4,947	2,429	49	2,226	91	45	35
Total.....	769,805	540,051	69	337,254	63	35	

Enrollment based on 1917 report because of apparent error.

Plainly, a county which is not sufficiently awake to its responsibilities to the community in educational matters to compel all those children to enroll in school who ought to be in school should not receive State educational funds based on school population (7 to 21, inclusive). A more equitable method would be to apportion them directly on the basis of aggregate daily attendance. This is eminently fair and would probably awaken these counties to their responsibilities to the State at large.

The compulsory school attendance act.—An attendance act was passed in 1915 which aims to guarantee to every child a reasonable amount of educational opportunity in the State. The requirements of the law are low, and the machinery required for its enforcement

quite inadequate. By reason of this, the school enrollment and school attendance have made no marked improvement since the law's enactment. Any law is difficult to enforce unless public sentiment is back of it. Public school education is comparatively new in Alabama and some people still cling to the select school idea and their so-called personal rights in the matter of educating their own children. This fallacious doctrine has been slow to yield to belief in personal responsibility toward the larger social group—the State. Another reason for lax enforcement of the law is stated quite frankly by many educators in the following manner: If the law were to be strictly enforced, and all children of school age (falling within the compulsory requirements) should actually appear in school, there would be neither schools nor teachers enough in the State to accommodate them. If, for example, 90 per cent of the school population should become enrolled (and this per cent can reasonably be expected under good conditions), the white teachers now in the schools would average 45 pupils each, and the colored teachers 104 each.

It will be necessary to make much greater investment in material plant, and in instructors, if the law is to be enforced; for a citizen undeniably has the right to demand of the State decent, sanitary school premises, and reasonably well-prepared teachers in return for relinquishing to the State control of his children for 6 or 7 hours daily.

These are the salient points of the law:

1. The attendance period is between the ages of 8 and 15 years inclusive.
2. The minimum attendance during such period is 80 days, although county boards of education have the authority to reduce it to 60 days for any particular school.
3. The compulsory period begins at the opening of the school in the fall, unless the county board directs otherwise.
4. These children are exempted under the law—
 - (a) Children who have finished the seventh grade.
 - (b) Children who live more than $2\frac{1}{2}$ miles from the school unless transportation is furnished.
 - (c) Children who are physically or mentally incapacitated.
 - (d) Children who are attending private or parochial schools.
 - (e) Children who are unable to attend on account of poverty.
5. Attendance officers are provided to investigate cases of non-attendance reported to them by the teachers, and to enforce school attendance.
6. Habitual truants may be committed to State institutions for juvenile offenders, and their guardians may be fined or imprisoned.

Compulsory education laws are intended to assure every child such educational opportunities as the State offers. The laws are intended to protect future citizens, and, through them, protect the State against selfish, narrow-minded, and ignorant guardians who would traffic in the labor of their children or wards, and so deprive them of equal educational opportunities with other children. Compulsory attendance laws certainly are not intended to hamper the fair-minded citizen or in any way encroach on his rights. They are merely intended to protect him and his children from the withering effects of ignorance and illiteracy common among the indifferent and selfish. The compulsory attendance laws of the State should, therefore, be so strong and free from loopholes as to give the commonwealth real protection from self-willed and calculating individuals. The Alabama law is not satisfactory in these respects. It should be amended by the present legislature in several essentials, as the following analysis shows:

1. The attendance period—8 to 15, inclusive—can be made satisfactory as soon as the minimum attendance requirement is modified and not before. What good will it do to designate a period of years as compulsory attendance period if annual attendance can be legally satisfied in 80 or 60 days of actual attendance? In practice, however, this has interfered seriously with the study plan and has hindered the progress of the rest of the school, without being of great value to the attendance child himself. The age-grade tables, shown later in this section, prove conclusively that there are large numbers of children 15 years of age and over who have not advanced beyond the first, second, or third grade. This is because these children enrolled late, or are irregular in attendance. This destructive practice should be stopped by law at once, as much for the sake of the regularly enrolled children whose work is hindered as for the attendance children themselves.

2. The minimum attendance period is 80 days and may be reduced to 60 days. The trend of the times is to make the schools long-time schools, keeping open 9 or more months in the year. States that have had compulsory laws for a period of years are gradually learning to make the "attendance period" correspond to the regular school year so that, during the compulsory attendance years, children must attend school throughout the regularly appointed school term. This is none too much, but it would make it possible for the average citizen to complete at least the 7-year elementary education, without which Alabama can not expect that degree of intelligent leadership which the State has reason to expect of all its citizens. The survey committee is convinced that the 80 and 60 day minimum attendance clauses should be dropped, and all children of compulsory

attendance age be required to attend throughout the regular school term. Furthermore, work permits should be issued only on educational requirement equivalent to completion of the fourth grade instead of as now a minimum of 60 days' attendance during the previous year.

3. In the matter of exemptions—

- (a) Children who have completed the elementary school course and hold the county superintendent's certificate to this effect should be excused from further legal attendance.
- (b) Children who live more than $2\frac{1}{2}$ miles from school should not on that account be excused. It is the business of educational authorities to see to it that these children get equal educational advantages with their neighbors. Until it becomes feasible to provide accessible schools, transportation should be provided at public expense, or the children be boarded at public expense near a neighboring school.
- (c) Children should not be exempted on the plea of poverty. The State should, if investigation disclosed the necessity, furnish books; and in any Alabama county the people will certainly find sufficient clothing to enable any child to attend school if their attention is called to the need.
- (d) The most searching examination should precede granting of exemptions on the plea that the children's work is needed at home, or to support other members of the family. This excuse is often abused and forms, perhaps, the most serious loophole in the law.

4. In general, the provisions for enforcing the law have not the necessary "punch" for successful enforcement. No one person is seemingly responsible for the enrollment and attendance of the children. Provisions should be made for a chief attendance officer responsible ultimately to the State department of education to direct the county boards of education and county superintendents and local attendance officers and teachers in their efforts to bring the school population into school. In him should be vested the ultimate authority and responsibility. He should also direct the biennial school census.

School enrollment and attendance.—An effective school system not alone enrolls a large per cent of the children, but it holds all who are physically and mentally fit to daily attendance until they have at least finished the elementary course. Inclement weather, bad roads, long distance to school, and, particularly, lagging interest in school studies contribute to irregularity of attendance. In an efficient school system schools are organized wherever they are needed, and the school work is made interesting and attractive enough to sustain in the child a desire to be regular in attendance.

Alabama is contending against many difficulties and can not be expected to provide anything like ideal school conditions for some years; but even after accounting for such handicaps as a two-race school system and meager school support school attendance is very unsatisfactory. This is graphically illustrated in figure 8, which shows that, in addition to an enrollment of only 69 per cent of the whole school population, 63 per cent of this enrollment only is in daily attendance and 35 per cent only of the whole school population. This condition calls for serious consideration and early remedy.

Viewed in the light of the nation as a whole, Alabama ranks forty-third in attendance and forty-third in enrollment. This is undeniably additional argument in favor of changing the constitutional

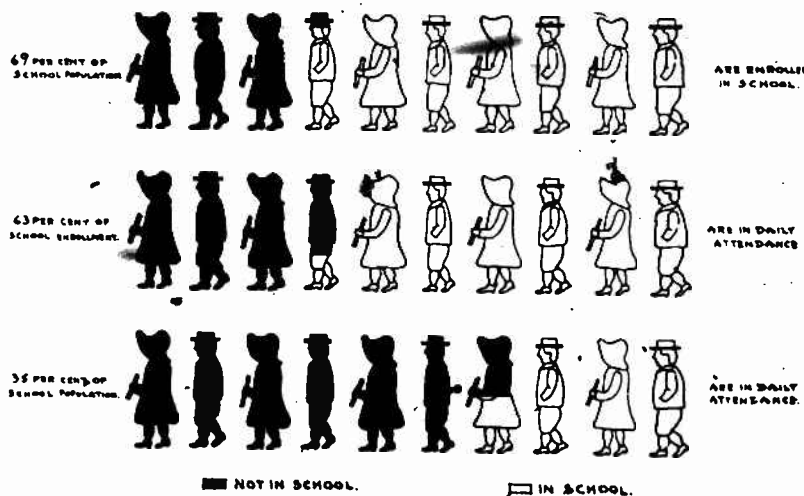


FIG. 8.—School population, enrollment, and attendance, 1918.

provision which apportions State school funds on the school population to an aggregate attendance basis. This would be a great inducement to boards of education and school communities to enroll and hold in school a large per cent of the school population in order that they might get in return a good share of the State educational funds.

Age-grade records.—Normal children, who in Alabama enter school at 7 years of age, are expected to advance one grade a year and finish the seventh year of the elementary school at the age of 14. If the children enroll at later than 7 they can not expect to complete the course at 14; likewise, if they are irregular in attendance, the same condition will prevail. The survey committee has gathered data on 253,433 children, white and colored, in all kinds of schools, to ascertain how early the children actually enter school and how well sustained is their continuance in school. Tables 3, 4, and 5 give the enrollment, by years, for white children in rural, village (places below

2,000 people), and city schools. The double columns, embraced between the heavy black lines, contain the "normal age" pupils; i. e., pupils who are in classes where they normally belong if they entered school at 7, and have advanced one grade a year since that time. Those to the left and below these lines are "under age," or ahead of their classes because they are younger than they should be in their respective classes. For the same reason, all to the right and above the heavy lines are "over age," or behind in their classes.

A first glance at the tables shows that many children enter school before they are 7, indeed almost as many as would have entered if the law of entrance had read "six years." In this respect the State law should be changed to comply with the popular demands which, in this instance, coincide with the natural school age. For whether or not the State changes the entrance age from 7 to 6, the children will manage some way to gain admittance to school.

TABLE 3.—White schools—Rural.

AGE-GRADE OF PUPILS.

Grades.	Under 6.	Over 6 years up to 7.	Over 7 years up to 8.	Over 8 years up to 9.	Over 9 years up to 10.	Over 10 years up to 11.	Over 11 years up to 12.	Over 12 years up to 13.	Over 13 years up to 14.	Over 14 years up to 15.	Over 15 years up to 16.	Over 16 years up to 17.	Over 17 years up to 18.	Over 18 years up to 19.	Total by grades.
I.....	1,972	8,511	7,531	1,693	3,604	1,532	842	495	290	116	58	30	11	2	26,693
II.....	81	702	1,941	2,842	2,602	1,954	1,159	676	447	209	64	33	7	1	12,831
III.....	72	481	1,709	2,327	2,392	1,908	3,336	775	389	221	77	11	1	1	14,103
IV.....	8	69	1,331	1,486	2,432	2,387	2,069	1,527	852	486	217	68	34	2	12,164
V.....			8	73	858	1,135	1,846	1,956	1,758	1,194	788	336	119	77	9,658
VI.....				12	72	278	804	1,323	1,640	1,611	1,142	680	310	104	8,356
VII.....					7	45	215	566	1,003	1,312	1,276	1,132	702	545	6,835
VIII.....						26	95	233	404	494	557	390	311	86	2,596
Total of ages...	2,053	7,348	10,029	9,910	9,866	9,801	9,346	10,854	7,646	6,207	4,502	2,806	1,537	952	93,236

TABLE 4.—White schools—Places below 2,000 population.

AGE GRADE OF PUPILS.

Grades.	Under 6.	Over 6 years up to 7.	Over 7 years up to 8.	Over 8 years up to 9.	Over 9 years up to 10.	Over 10 years up to 11.	Over 11 years up to 12.	Over 12 years up to 13.	Over 13 years up to 14.	Over 14 years up to 15.	Over 15 years up to 16.	Over 16 years up to 17.	Over 17 years up to 18.	Over 18 years up to 19.	Total by grades.
I.....	360	1,883	3,086	1,670	1,028	565	287	184	112	61	18	10	6	3	9,263
II.....	18	177	1,240	1,571	1,007	627	379	200	143	72	29	11	3	1	5,503
III.....	23	265	930	1,247	946	655	469	267	118	79	39	7	5	1	5,083
IV.....		43	212	839	1,238	872	748	484	300	236	62	17	4	1	5,050
V.....			67	223	755	1,002	832	806	369	248	61	39	6	1	4,206
VI.....				6	68	212	622	877	748	570	323	165	66	22	3,734
VII.....					2	20	138	541	803	800	574	304	171	61	3,315
VIII.....							15	133	307	401	368	344	217	175	2,079
Total of ages...	372	2,088	4,508	4,868	4,508	4,522	4,008	4,081	3,123	2,860	1,880	866	508	278	88,232

TABLE 5.—White schools—cities.

AGE-GRADE OF PUPILS.

ELEMENTARY SCHOOL.

Grades.	Under 6	Over 6 years up to 7.	Over 7 years up to 8.	Over 8 years up to 9.	Over 9 years up to 10.	Over 10 years up to 11.	Over 11 years up to 12.	Over 12 years up to 13.	Over 13 years up to 14.	Over 14 years up to 15.	Over 15 years up to 16.	Over 16 years up to 17.	Over 17 years up to 18.	Over 18 years up to 19.	Over 19 years and over.	Total by grades.
I.....	249	1,479	3,710	1,857	634	323	145	87	27	8	23	12				8,554
II.....	22	217	1,441	2,238	1,208	682	345	181	83	43	11	4				6,534
III.....		27	142	886	2,127	1,492	687	443	217	119	47	11				6,196
IV.....			49	188	1,120	1,913	1,464	782	465	232	79	22	5			6,323
V.....				6	69	314	987	1,611	1,319	764	353	137	48	9		5,000
VI.....					54	243	968	1,420	1,126	642	284	76	11	2		4,826
VII.....						35	191	687	1,210	934	484	177	61	4		3,809
Total.....	271	1,727	5,348	5,228	5,510	5,675	5,411	4,919	3,892	2,349	1,067	350	86	9		41,851

HIGH SCHOOL.

First year.....							25	100	603	1,116	827	449	432	31	6	3,349
Second year.....								10	122	424	655	484	286	3	35	2,015
Third year.....									69	207	353	219	80	9		967
Fourth year.....									78	176	174	240	156	72		905
Total.....							25	170	725	1,987	1,865	1,490	882	270	122	7,236

A few pupils listed in fifth year of high school not included.

Tables 6, 7, and 8 give the age grades of colored children in rural, village, and city schools:

TABLE 6.—Colored schools—rural.

AGE-GRADE OF PUPILS.

Grades.	Under 6	Over 6 years up to 7.	Over 7 years up to 8.	Over 8 years up to 9.	Over 9 years up to 10.	Over 10 years up to 11.	Over 11 years up to 12.	Over 12 years up to 13.	Over 13 years up to 14.	Over 14 years up to 15.	Over 15 years up to 16.	Over 16 years up to 17.	Over 17 years up to 18.	Over 18 years up to 19.	Total by grades.
I.....	728	4,264	4,060	3,179	2,518	1,646	1,170	796	429	342	162	79	58	25	19,456
II.....	35	307	800	1,350	1,565	1,253	1,131	987	677	338	157	55	23	10	8,697
III.....		42	191	410	738	924	1,056	1,051	850	610	358	115	55	14	6,414
IV.....			54	70	298	518	716	924	1,028	834	523	322	149	43	5,485
V.....				13	64	166	281	471	604	616	527	324	175	70	3,305
VI.....					6	44	78	133	272	308	343	225	190	114	1,710
VII.....							24	46	87	95	124	119	77	55	600
VIII.....								27	38	73	76	68	60	70	412
Total of ages.....	763	4,613	5,106	5,040	5,186	4,542	4,451	4,440	3,955	3,266	2,270	1,307	787	401	46,079

TABLE 7.—Colored schools—Places below 2,000 population.

AGE-GRADE OF PUPILS.

Grades.	Under 6.	Over 6 years up to 7.	Over 7 years up to 8.	Over 8 years up to 9.	Over 9 years up to 10.	Over 10 years up to 11.	Over 11 years up to 12.	Over 12 years up to 13.	Over 13 years up to 14.	Over 14 years up to 15.	Over 15 years up to 16.	Over 16 years up to 17.	Over 17 years up to 18.	Over 18 years up to 19.	Total by grades.
I.....	286	1,638	1,621	1,179	727	460	331	237	109	94	43	22	10	5	6,762
II.....	7	83	323	568	556	464	296	299	137	94	42	22	6	4	2,899
III.....		17	56	267	380	305	405	310	290	135	74	33	14	10	2,356
IV.....		2	2	42	196	280	421	367	313	271	164	62	26	17	2,163
V.....				11	34	99	203	290	296	277	189	82	56	21	1,560
VI.....				2	10	32	122	135	242	191	219	117	51	26	1,167
VII.....						9	35	43	104	119	123	138	61	42	674
VIII.....								28	39	51	76	83	89	68	434
Total of ages....	293	1,740	2,002	2,067	1,903	1,709	1,815	1,729	1,530	1,232	930	559	313	193	18,015

TABLE 8.—Colored schools—Cities.

AGE-GRADE OF PUPILS.

ELEMENTARY SCHOOL.

Grades.	Under 6.	Over 6 years, up to 7.	Over 7 years, up to 8.	Over 8 years, up to 9.	Over 9 years, up to 10.	Over 10 years, up to 11.	Over 11 years, up to 12.	Over 12 years, up to 13.	Over 13 years, up to 14.	Over 14 years, up to 15.	Over 15 years, up to 16.	Over 16 years, up to 17.	Over 17 years, up to 18.	Over 18 years, up to 19.	19 years and over.	Total, by grades.
I.....	79	1,234	2,176	1,527	1,027	636	454	246	140	39	10	3	2	2	6	7,581
II.....		103	491	671	677	981	450	374	831	54	34	11	2	1		4,683
III.....		6	130	371	533	630	559	451	335	168	74	13	6	1		3,297
IV.....			15	98	281	380	478	512	396	274	125	51	30	4		2,648
V.....				7	66	178	293	368	431	269	224	58	12	1		1,909
VI.....					10	52	126	202	240	141	59	30	9			1,115
VII.....						6	30	106	84	177	174	88	36	14		713
Total.....	79	1,346	2,812	2,674	2,614	2,869	2,390	2,215	2,508	1,221	782	283	118	32	6	21,949

HIGH SCHOOL.

First year.....							29	36	98	126	111	58	46	5		509
Second year.....							25	12	31	47	56	34	16	2		223
Third year.....									31	44	70	42	21	11		222
Fourth year.....										37	55	36	26	13	40	207
Total.....							54	48	160	251	292	170	112	31	40	1,161

Tables 9 and 10 show conclusively that, (1) an overwhelming number of school children are over age, and thus behind the grades in which they normally belong, and that, (2) the wastage and losses up through the grades are regrettably large. To be more specific, in Table 9 we find that in an enrollment of 126,793 white rural and village children, only 5.5 per cent are ahead of their grades, and 40.1 per cent are classified as normal, while 54.4 per cent are over age—in other words, that more than one-half of all the children in these schools are laggards, and this mainly because of late entrance and poorly sustained attendance. Conditions are considerably better in city schools, as is shown in Table 10. Here 4.3 per cent are under

age, and 52.1 per cent are of normal age, and 43.6 per cent over age. In normal age the city schools show an improvement over the rural school of exactly 12 per cent. This indicates the superiority in organization and general efficiency of Alabama's city schools over the village and rural schools.

TABLE 9.—*Rural and village children under normal age, of normal age, and over age.* (White schools.)

Grades.	Number in each grade.			Total in each grade.	Per cent in each grade.		
	Under age.	Normal age.	Over age.		Under age.	Normal age.	Over age.
I.....	2,332	19,011	14,613	35,956	6.5	52.9	40.6
II.....	1,038	7,582	9,714	18,334	5.7	41.3	53.0
III.....	874	6,613	11,699	19,186	4.6	34.4	61.0
IV.....	864	6,002	10,348	17,214	5.0	34.9	60.1
V.....	741	4,741	8,381	13,863	5.3	34.2	60.5
VI.....	648	3,986	7,476	12,090	5.4	32.8	61.8
VII.....	457	2,917	6,776	10,150	4.5	28.7	66.8
Total.....	6,954	50,832	69,007	126,793	5.5	40.1	54.4

TABLE 10.—*City children under normal age, of normal age, and over age.* (White schools.)

Grades.	Number in each grade.			Total in each grade.	Per cent in each grade.		
	Under age.	Normal age.	Over age.		Under age.	Normal age.	Over age.
I.....	249	5,189	3,116	8,554	2.9	60.6	36.5
II.....	239	3,679	2,616	6,534	3.7	50.3	46.0
III.....	169	3,013	3,014	6,196	2.7	48.6	48.7
IV.....	241	3,033	3,048	6,323	3.8	48.	48.2
V.....	379	2,598	2,632	5,609	6.8	46.3	46.9
VI.....	297	2,388	2,141	4,826	6.2	49.5	44.3
VII.....	230	1,897	1,682	3,809	6.	49.8	44.2
Total.....	1,804	21,797	18,250	41,851	4.3	52.1	43.6

Tables 11 and 12 give, on the percentage basis, the "under age," "normal age," and "over age" ratings of these colored children.

It will be readily noticed that conditions are much worse among the colored school population than among the white. Table 11 shows that only 30.4 per cent of the 63,248 colored rural and village children are of normal age, while the unusually large number of 66.1 per cent are over age. When applied to the city children (Table 12), it is found that 32.3 per cent are of normal age, and 65 per cent over age. This condition is serious. It shows definitely that the colored school population is neglected. No one seems interested in the enforcement of the compulsory attendance act so far as the Negroes are concerned. Indeed, if the law were enforced, it would soon appear that the State has not the material equipment, nor the teachers, to take care of this school population. Many superintendents have shown a startling indifference to the colored rural schools. Under the old régime,

prior to 1915, some county superintendents did not even pretend to supervise the colored schools. Now conditions are better, but far from what they should be. Not much can be expected in the way of efficiency so long as the school system permits its enrolled school

PERCENTAGES OF CHILDREN OF NORMAL AGE-GRADE
IN RURAL AND VILLAGE SCHOOLS, BOTH RACES

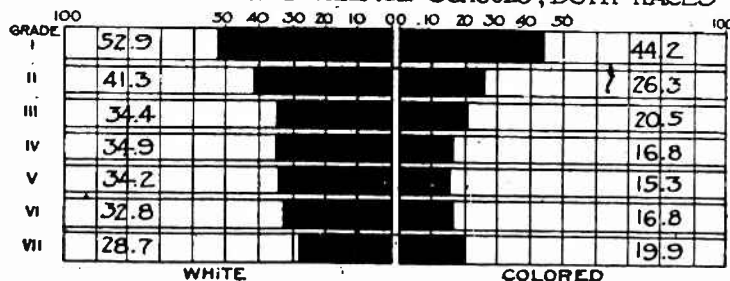


FIG. 9.

PERCENTAGES OF CHILDREN OF NORMAL AGE-GRADE
IN CITY SCHOOLS, BOTH RACES

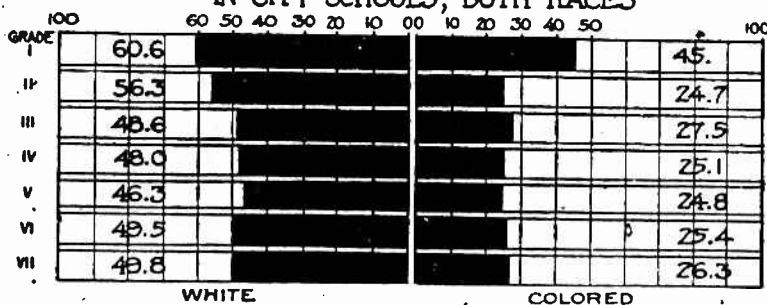


FIG. 10.

children to come and go much as they please. Not until strict measures are taken to enforce a better enrollment and greater regularity of attendance can the overwhelming age-grade retardation be remedied.

TABLE 11.—Rural and village children under normal age, of normal age, and over age. (Colored schools.)

Grades.	Number in each grade.			Total in each grade.	Per cent in each grade.		
	Under age.	Normal age.	Over age.		Under age.	Normal age.	Over age.
I.....	1,014	11,583	13,621	26,218	3.9	44.2	51.9
II.....	432	3,048	8,116	11,596	3.7	26.3	70.0
III.....	306	1,705	6,669	8,770	3.5	20.5	76.0
IV.....	179	1,290	6,180	7,648	2.4	16.8	80.8
V.....	122	745	3,908	4,865	2.5	15.3	82.2
VI.....	94	485	2,298	2,877	3.2	16.8	80.2
VII.....	68	283	653	1,274	5.3	19.9	74.8
Total.....	2,315	19,198	41,836	63,348	3.5	20.4	66.1

TABLE 12.—*City children under normal age, of normal age, and over age. (Colored schools.)*

Grades.	Number in each grade.			Total in each grade.	Per cent in each grade.		
	Under age.	Normal age.	Over age.		Under age.	Normal age.	Over age.
I.....	79	410	4,092	7,581	1.	45.	54.
II.....	106	1,162	3,435	4,703	2.3	24.7	73.
III.....	136	904	2,237	3,277	4.1	27.5	68.4
IV.....	113	667	1,868	2,648	4.3	25.1	70.6
V.....	73	473	1,303	1,909	3.8	24.8	71.4
VI.....	62	285	771	1,118	5.6	23.4	69.
VII.....	36	188	489	713	5.	20.3	68.7
Total.....	605	7,089	14,255	21,949	2.7	32.3	65.

Wastage up through the grades.—Figure 11 is a pyramidal arrangement illustrating the loss of pupils up through the grades. It is based on the reports of 253,433 pupils. Grade 1 contains 78,309 pupils, white and colored. Grade 2 contains 41,157 pupils. The number finally drops to 15,948 in the seventh year, or about one-fifth of the number given in the first grade.

Length of school year.—The next question is, how many days in the year are the schools open for school purposes, and how does the length of the Alabama school year compare with school terms in other States? Table 13 answers the first query, and figure 12 the second. The school year has practically stood still for 4 years, so far, as length is concerned. City schools for white children average nearly 9 months in length; the other schools have terms altogether too short for a standard school year's work.

TABLE 13.—*Length of school term, in days.*

Years.	Rural.		Urban.		Combined.	
	White.	Colored.	White.	Colored.	White.	Colored.
1917-18.....	123	87	178	171	132	102
1916-17.....	119	89	178	174	130	104
1915-16.....	118	90	177	175	129	106
1914-15.....	121	88	179	175	132	104
1913-14.....	118	87	174	151	135	104

The graphic chart (10) ranks Alabama as the thirty-eighth State on basis of length of school term.

It will require greatly increased funds to give Alabama school terms long enough to meet the urgent present needs. Meanwhile, in this State, as elsewhere, the ultimate solution of school terms and school attendance will lie in well-taught, all-year schools; i. e., community schools with permanent teachers living on the school premises 12 months in the year, keeping school open at least 180 days annually,

DISTRIBUTION OF 253,433 PUPILS BY GRADES, 1918

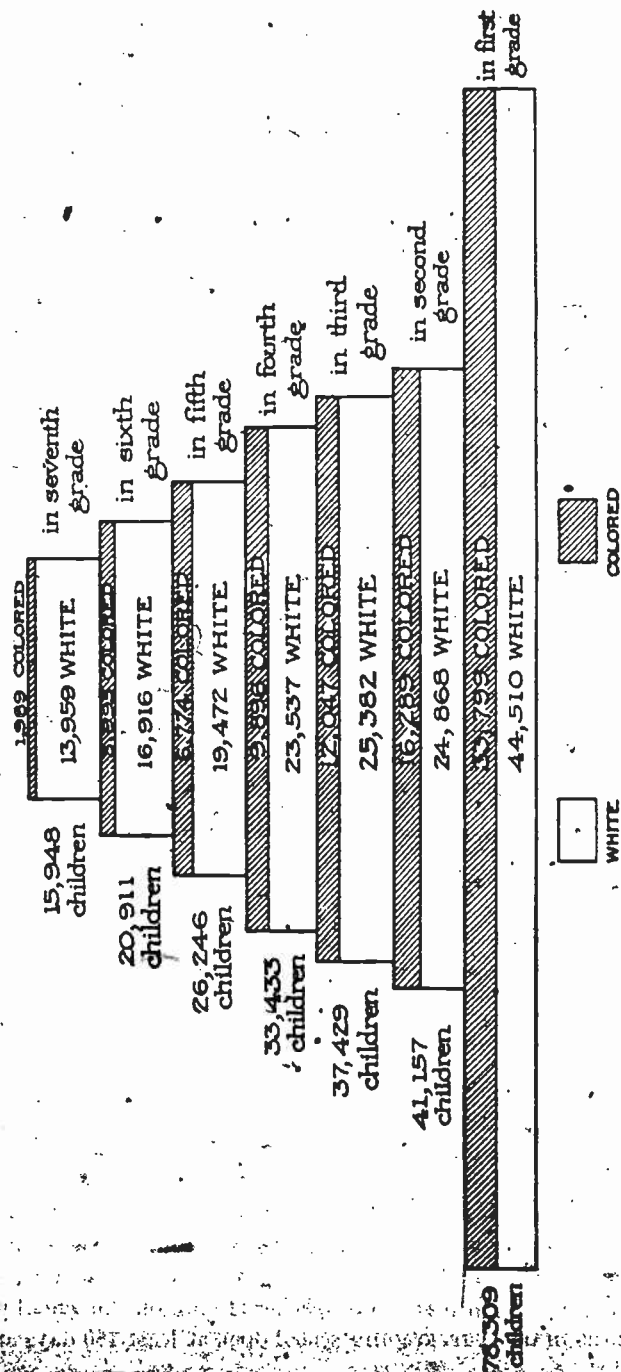


FIG. 11.

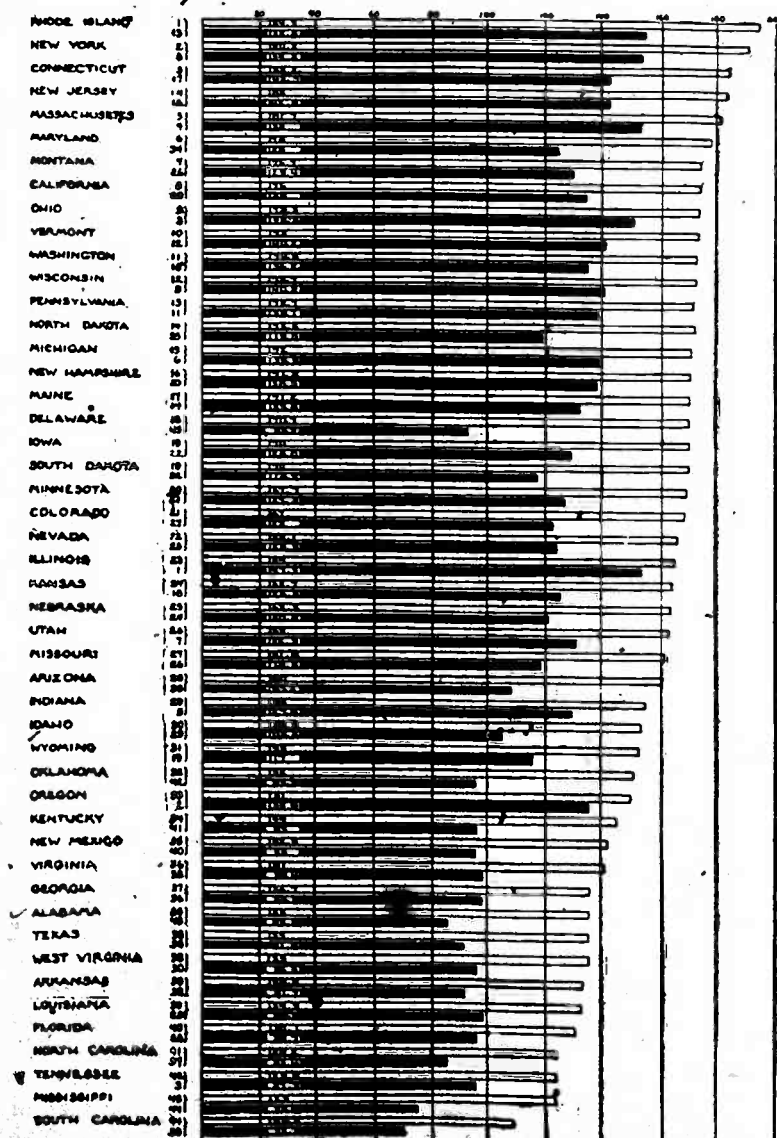
and occupying themselves with other kinds of community education the remainder of the year.

Just when school should be closed for vacation is another important matter. Educators are beginning to realize that vacation time should, so far as possible, be regulated by the work needs of the community. It is quite certain that these conditions vary greatly in Alabama, from the horticultural belt near the Gulf through the cotton-producing Black Belt to the Tennessee Valley, with its varied crop production. The school program should be planned with regard to these needs, not, however, by shortening the school term, but by regulating the attendance of certain grades of pupils by the work needs of the community. Thus, during fruit-picking time or cotton planting or picking time, school work of the upper grades may be discontinued entirely for a certain specified time, and the daily program readjusted to give to the lower grades the time formerly devoted to the advanced grades. This should be a matter of dismissing grades rather than children of certain ages; otherwise it would upset the entire program and would result in the same chaotic condition that now prevails in many of the schools. It is true that so long as the schools are troubled with the large number of over-age pupils that they now are, this plan will be difficult to enforce. The purpose would be to make the program more flexible, but not to close the school or let the children come and go at everyone's beck and call. A program of this kind could be planned by the county superintendents working in conjunction with the State department, and if thoroughly well done would help to overcome difficulties and even injustices done certain sections of the State.

Conditions summarized.—Alabama has invested large sums of money in permanent school plants, which, while in no wise satisfactory or filling all the demands of modern schools, are all that the State has seen its way clear to provide. This investment is not utilized to best advantage; nor does it receive the care and upkeep that it should have. The chief loss lies in indifferent organization and administration, and in a teaching process that does not give the children the type of instruction needed in this great agricultural State. This is proved by the comparatively small enrollment of school population and very low daily attendance. In enrollment of school population, and in daily attendance as well, the State ranks forty-third in the Nation as a whole. This is a poor showing. If the daily attendance were reckoned on school population instead of on enrollment, only 85 per cent of the school population would be in school daily. The school year is only 132 days long, and the average number of days attended by each pupil enrolled is 85—only three States making a worse showing. The average number of days

attended by each child of school age is 45. The schools ought to be reorganized on the all-year plan. As a beginning the school year

LENGTH OF TERM AND ATTENDANCE. 1916.



The light line indicates the total number of days the schools were in operation. The heavy line indicates the average attendance.

FIG. 12.

should be lengthened to 9 months of 20 school days each. An average pupil's school life in Alabama is surprisingly short because of

late enrollment and irregular attendance. Very few rural children, unfortunately, get the advantages of secondary and higher schools despite the fact that the State supports 9 district agricultural schools and county high schools in a majority of the counties. Nearly all the culture and all the technical and practical education of Alabama agricultural folk must be acquired in the small schools during the short period now allotted to school life. Every thoughtful person will agree that the level of culture necessary to practical leadership can not be elevated much until radical changes are made in the organization of the small schools, chiefly the outlying rural schools.

Recommendations for improving school attendance and effectiveness of class organization.—On the basis of the foregoing discussion the survey committee recommends:

1. That steps be taken to change the "School Population Age" to include all children between 6 and 18 years, inclusive, but no person older than 16 years should be excluded from school.
2. That the school entrance age be changed from 7 years to 6 years.
3. That constitutional provision be made for apportioning the State school funds on some other basis than the present school population (see Chapter XXIV).
4. That provision be made for a chief attendance officer, as member of the State department of education.
5. That the compulsory attendance law be changed as follows:
 - (a) Remove the 80-day and 60-day attendance minimum and require all normal children to attend school throughout the regularly provided school term.
 - (b) Issue work permits only to pupils who have completed the fourth grade, and can furnish satisfactory evidence thereof, instead of as now being based on 60 days' attendance during the previous year.
 - (c) Safeguard the law by limiting its exemptions as prescribed above in this chapter.
6. That a system of records be perfected by the State department of education to be used in transferring pupils from community to community, to make evasion of school attendance impossible.
7. That the school year be lengthened to 9 months of 20 school days each.
8. That all the schools gradually be reorganized as "all-year schools," in charge of professional teachers.

Chapter VII.

THE RURAL SCHOOLS OF ALABAMA.

The need of unifying and equalizing educational opportunities.-- For practical school purposes Alabama may be considered a rural State. Agriculture is now and will continue to be the occupation of the majority of the people, though mining, commerce, and industry are important and growing occupations. There are few large cities in the State. The people live almost wholly in small communities, mining camps, and on the farms. The rural schools and those outside the larger centralized places are the schools in which the majority of the children of the State receive their education. Moreover, it is with these schools that the State itself, through legal and administrative provisions, is most concerned and for which, with liberal equalizing and standardizing funds, it can and should do most. Experience in all States shows that cities and towns with their more concentrated resources and cosmopolitan populations are better able and more disposed to provide ample school facilities for their children. Yet the prosperity, progress, and growth of the State are dependent upon the intelligence of the people of the farms and small communities in a greater degree, in so far as they outnumber those in the cities. In these days of easy migration it is of little value even to the cities themselves to educate city children and neglect those in the surrounding communities upon which they depend for the enlargement and replacement of their own population. Certainly the State's interest is to provide a system such that all the children within its borders may have an equal chance for an education.

Alabama is in particular need of unifying and equalizing educational opportunity, and of encouraging local initiative and interest in a far greater degree. The resources of the State will never be developed to their fullest capacity or its possibilities fulfilled until there is a more nearly universal appreciation of the value of education among the people and a greater effort is put forth to provide better schools. Already there are signs that agricultural and industrial resources are developed most fully by persons from other States, because of the lack of educated and trained leadership from within. The greatest wealth of any State is in an educated population.

Without trained people Alabama's vast riches in minerals, timber, and fertile soil are but useless materials. It can not be counted among the progressive States until the mass of its people are educated at least to the degree obtained from good elementary and secondary schools.

Administration of the rural schools.—Alabama has made some striking improvements as far as the method of administration for open country and small community schools is concerned. The adoption of the county unit of administration and the provision for county taxation were great strides in the direction of progress. In the counties observed by the committee the county tax is making possible improvements hitherto undreamed of, though of course quite inadequate to the real needs. The committee found the income from the county tax used for better buildings, longer terms, and higher salaries for teachers. Apparently the county boards are making every effort to the end that the meager sums provided for school support shall fill as many needs as possible (see section on finance). There are many indications that the people, in the majority of the counties, are rapidly obtaining a realization of the need for further progress that will justify the removal of the three mill tax limitation.

The personnel of the county boards is remarkably fine. In many cases members of the committee attended meetings or met individual members of the boards. They were found without exception to be capable, interested and forward looking. Meetings were carried on in a business-like manner. The boards are apparently made up of the counties' most representative citizens, farmers, business men, professional men, housewives, and the like. No records were kept under the old régime, and therefore comparisons are not possible. But the business like methods adopted under centralization in the purchase of supplies and carrying on of other business must result in a large measure of economy.

While equality of opportunity is not accomplished throughout the State, it is in a measure accomplished within the counties. The county board assures the same term in all schools, and in so far as possible with present limitations (which are discussed later), pays the same salaries and endeavors to secure the same quality of teachers. The system promises far greater progress than has yet been made toward the accomplishment of at least a minimum standard in building and equipment requirements. The system has been in operation but a short time, and the money furnished is still altogether insufficient. Yet one has only to compare conditions under the old régime as still in evidence with the efforts being made by the new one to realize the magnitude of the improvement already accomplished.

The county superintendent.—The county superintendent is the executive officer of the board, and is appointed by the board for a

period and at a salary fixed by it. The board is not limited in its selection to the county or State, but is free to engage the best person obtainable and to pay all the financial condition permits. The boards are taking advantage of this in many counties. Salaries paid are as high as \$5,000. Of the 67 county superintendents in the State only 5 receive less than \$1,500. These salaries, while reasonable, are not liberal as compared with other States. Pennsylvania, for example, pays its county superintendents from \$2,000 to \$9,000. New Jersey pays all county superintendents \$3,000 per year. In Alabama, assistant supervisors, from 1 to 15, are provided in 19 counties, while 33 county superintendents have from one to four clerks. The observers found the supervisory force inadequate in all cases but one.

The educational qualifications of the superintendents are in most cases fairly good. Of the 67 superintendents, 36 have attended college from one to four years; 27 have attended normal school one or more years. Of these, 5 are within the group of 36 college attendants, making a total of 48 who have from one to four years of higher education. Twenty-four have college degrees. Nine of the acting superintendents have neither college nor normal training. Of these, 6 belong to the hold-over group. All but 1 report some previous experience. In 22 of the counties the superintendents selected under the old system were reappointed by the county boards. In the other 45 new superintendents were employed.

The county superintendents in the majority of the counties have a free hand in engaging and placing teachers, in interpreting the course of study within the limitation set by the State, in adjusting the salary scales, in overseeing buildings, and the like, and are not hampered by the board of education in carrying out the duties of an executive officer. In a few cases, the old idea of permitting local trustees to engage and dismiss teachers still exists. In one or two cases observed this plan resulted in the dismissal of several teachers during the year. However, the custom has practically been abandoned and may be left to die a natural death, as the people realize more and more the advantages of the new system.

Professional supervision of rural schools.—Expert supervision is perhaps the most important factor in rural school efficiency. Poorly trained and inexperienced teachers congregate in the country, especially in one-teacher schools. Small schools are difficult to organize. They are either so crowded as to render the teacher's time entirely inadequate, or so small as to obviate the possibility of interest. The most difficult problems in organization, discipline, course of study, and method confront the rural teacher. If left to meet them alone chaos usually results. Careful direction, intelligent advice, and constructive criticism are nowhere so necessary as in rural schools.

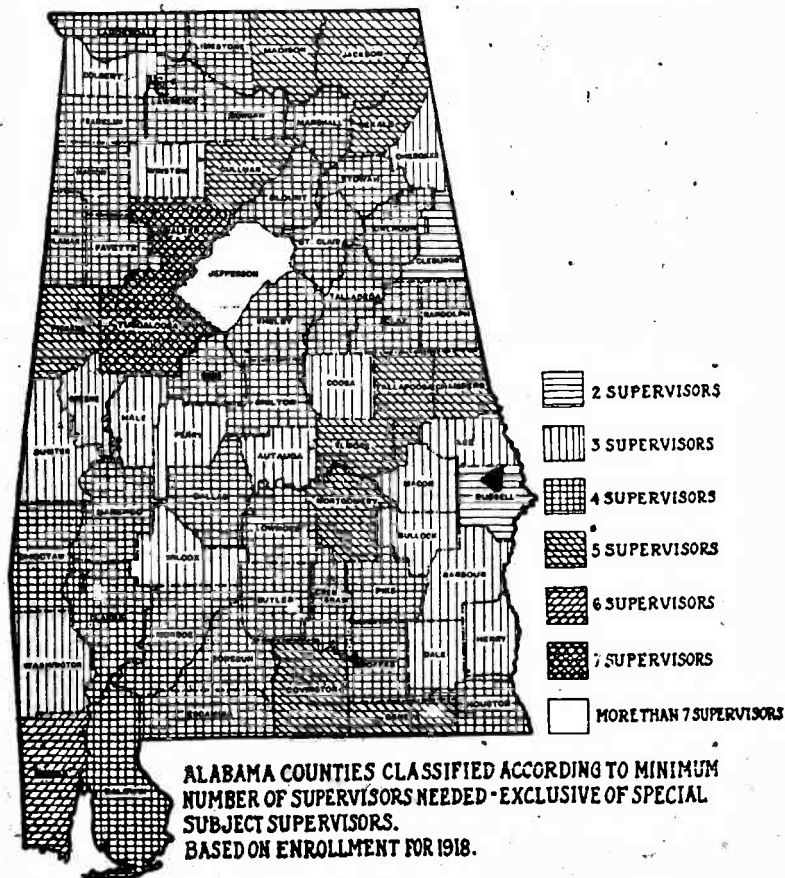
Supervision includes carrying out a plan for training teachers in service, such that by it a poor corps may be developed into a good one and one originally good may be made better. The supervisor must have personality and magnetism; ability to inspire others with loyalty to his efforts and to develop that *esprit de corps* which characterizes the staff of an efficient system. He must in addition be able to give general and specific instruction in carrying out plans for the conduct of the system through circulars, letters, visits, teachers' meetings, and in all other ways at his command. This necessitates close association with teachers in the classroom. They must be assisted and directed specifically in methods of work, use of material, interpretation of the course of study and other difficult problems as they arise in the classroom. This can not be done through visits alone. The supervisor who depends on this method of supervision wholly will not meet with real success, since a sufficient number of such visits is a physical impossibility. He can no more depend on individual work than can the teacher who has 40 children in one classroom. The teachers must be dealt with in groups according to their needs, ability, training, and experience. Thus supervision is largely a matter of organization and leadership.

The supervisor is also a medium to promote good understanding between the teacher and the community. He works from the point of view of the system as a whole, of which each individual school is a component part. He has a broader view and more knowledge of the work than the teacher, and is not hampered so much by routine and detail.

This conception of supervision is emphasized here because it is one which, in the opinion of the committee, is not realized in Alabama. The supervisor is too often a visitor giving a little help now and then, infrequent and not to the point. Supervisors do not work with a view to definite accomplishment of a few things at a time, undertaking more and more as the staff is trained. It is possible to progress along general lines, while at the same time concentrating on certain ends, accomplishing them one at a time. The system so supervised will be good not in spots only. Some schools will, of course, be better than others, but a good system shows definite accomplishment in all schools, not in a few. The fact that there are untrained and inexperienced teachers in the State does not wholly excuse the supervisor, any more than slowness of some pupils excuses the teachers for lack of progress on the part of the class. These conditions designate situations or persons for concentration of effort, but not impossibility of achievement. This statement should not be interpreted to imply that boards are justified in employing untrained teachers. Only in rare cases can they be made wholly satisfactory. Supervision should begin

where normal school training leaves off. It can not accomplish its mission fully if required to do more.

The kind of supervision needed in Alabama can not be supplied wholly by the county superintendent. Until the counties are better organized under the provisions of the new law and are supplied with buildings, equipment, and a trained teaching force, the county superintendent should be relatively free to devote the greater part of his



MAP. 8.

time to administration. Grade supervisors to assist the county superintendent are needed in all counties at about the ratio of 1 supervisor to 40 teachers. Primary supervisors should in most cases be engaged first, since observation shows that the weakness of the school work lies largely in the poor training given in the lower grades. In addition to these, special subject supervisors for cooking and sewing, music, industrial arts, and physical education should be secured as soon as possible.

The committee desires to emphasize the necessity of selecting for this work persons whose qualifications fit them for the demands suggested here. The supervising officer should be fitted by education, training, and experience for his duties. He should have at least four years of college work, including professional training in supervision, administration, and teaching methods in addition to both supervising and teaching experience. He must combine with these, qualities of leadership and personality, ability to organize teachers for work and to train them to carry out his plans. No motives such as those of friendship, place of residence, and the like should enter into the employment of such important officers. The board should be guided by personal and professional qualifications only. Indeed it would be highly desirable and conducive to better ideals and standards if part of the supervisory force were selected from outside the State. Salaries, of course, must be liberal enough to appeal to well-qualified persons, or results need not be expected.

In 35 of the 67 counties the county board of education pays a portion of the salaries of the home demonstration agents. The amount varies, but probably averages about \$500 throughout the State. The committee observed the work of these agents in most cases with particular care in the hope of finding some substantial benefit to the schools. Relatively little work educative in its quality was found. The amount paid by the county boards of education seems to the committee quite out of proportion to the results obtained. In one case the county agent is also an assistant county superintendent. In the other counties the agents rarely work through the schools or add in any way to their efficiency. In some cases, notably in Jefferson County, the work done in the schools under direction of the special supervisor is apparently duplicated by county agents as to articles made and projects taught, though these differ slightly in methods. One county board, paying a number of its teachers \$40 per month for 7 months, or an annual salary of \$280 contributes \$535 to the salary of the county agent, who does not even report to the county superintendent of schools, and considers her responsibility to be to authorities other than the county board. However good work of this character may be in its general influence, it is not believed by the committee to be an economical investment on the part of the county boards of education at present, while they are so seriously handicapped for funds. The first interest of the county boards is the schools. When funds sufficient to pay for trained teachers and supervisors are secured they may then afford to help pay county agents provided their work is correlated with the school work and done under the direction of the county board of education.

School sites and grounds.—The modern consolidated school is the center of the community life, education and recreation, and should

be appropriately planned with this end in view. A healthful, convenient, beautiful, and well-drained site should be selected for the schoolhouse. There must be plenty of ground for a garden and an experimental plat where agriculture is taught, as well as ample room for play. The buildings should be properly placed on the ground to allow space for ball games, and surrounded by necessary walks, grass, and shrubbery. Shrubby of wonderful color and variety was abundant in Alabama during the visits made by the survey committee; one had only to transplant it from nearby places to make the school yard attractive and beautiful. Yet in only one group of all those visited was real interest in beautifying the school ground found. This is sometimes due to the fact that proper sites have not been selected, but more often it is due to thoughtlessness and neglect. Generally speaking, rural schools need much more ground than they now have. No school should be placed on a plot smaller than 5 acres, and from 15 to 25 acres are necessary for consolidated schools of any size.

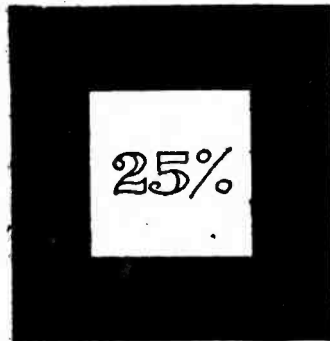
Rural school buildings.—The quality of school instruction is influenced by the teaching background furnished by the immediate school environment and the interest in the community. A community's attitude toward education may be measured, in some degree at least, by the generosity with which it furnishes suitable buildings and equipment and provides for their upkeep and proper maintenance. If the public is indifferent it may expect this indifference to be reflected in the attitude of the teacher and the children. Moreover, a competent, self-respecting teacher, with the right ideals for a schoolroom, will not accept a position in a community which does not show enough interest in the school to furnish a building which satisfies at least the minimum requirements of comfort and convenience and which can not be made an attractive place in which the children and teacher may take pride. Mark Hopkins and a log may have been very well before the days of modern arrangements for convenience and sanitation in schoolhouses. At present the demand for trained teachers exceeds the supply. It is not necessary to suffer the handicaps of unsanitary buildings and poor equipment. Good teachers seek positions in a community which offers favorable conditions for school work and superintendents can not persuade them to accept positions in entirely unattractive and unequipped buildings.

This is, however, but one phase of the matter. Children are entitled to be housed during school hours and school days in buildings which are at least comfortable and sanitary and which have the equipment necessary for good work. It is especially desirable that the rural school should set high standards of hygiene. Rural communities lack boards of health and the sanitary arrangements and regulations prevalent in cities. The record for disease and mor-

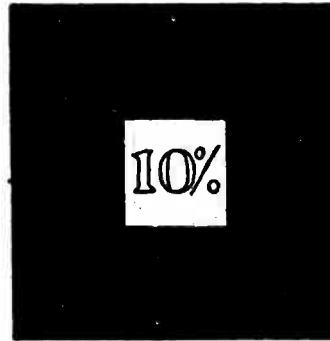
talities are out of all proportion to that of the city. Therefore, the school should not only protect the physical well-being of the children but should educate the tastes of the community to an appreciation of better conditions.

STANDARD RATIO OF GLASS AREA TO FLOOR SPACE AND MEDIAN RATIOS FOR THREE GROUPS OF ALABAMA SCHOOLS

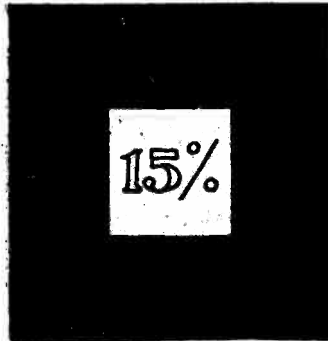
ACCEPTED STANDARD



MEDIAN FOR 1445 SCHOOLS



MEDIAN FOR 534 SCHOOLS



MEDIAN FOR 1166 SCHOOLS



FIG. 18.

School buildings in Alabama do not conform to these ideals. The majority of them are left-overs from the time when money for schoolhouses was obtained by subscription and the buildings built by the neighborhood carpenter or volunteers. Less than 15 per cent of the buildings observed by the committees were painted, although paint would have been well worth the money spent for it from the standpoint of preservation alone, since practically all the buildings

are frame. Stoves are almost universally unjacketed and the pipes in bad condition. Only a few of the larger new buildings have ventilating and heating facilities. Members of the committee made their visits during the pleasant days of the early spring, but were impressed with the probability of inadequate heat and ventilation which must prevail during the cold months. Cross lighting, insufficient lighting, improper window placing, or the absence of shades endanger the eyes of the children in 80 per cent of the buildings visited.

Very few, even of the new buildings, have separate auditoriums. It is a common practice among two or three, or even eight and nine room schools, to fit the building with folding doors of some kind that admit of opening two or more rooms into one to serve the purpose of an auditorium. This is very well as a temporary expedient, but is unsatisfactory, especially for large, well-planned, and expensive buildings. In the first place, there are few which fit or close satisfactorily. They are not in any sense sound-proof, are often unsightly and occupy space which, because of its relation to the seating, should be used for blackboards. It was noticeable, too, that in many new buildings the rooms provided for special work such as manual training, cooking, and sewing, were not appropriate in size, shape, location, etc., for the purpose for which they were intended. At the same cost, or a trifling additional cost, many school conveniences such as closets and cloakrooms can be provided if the matter is given due consideration before the building is completed. These and similar matters indicate that some one who makes a special study of school architecture should be employed in the State department of education to make suggestions and recommendations in all cases where school buildings are being constructed.

The committee believes it worth while for those intrusted with the construction of schoolhouses to give more serious considerations to the use of basements. Ordinarily, a given amount of room in a basement is not so expensive as it is above ground, and useful space may be secured in this way at relatively small cost. Basements add to the substantial appearance and wear of buildings, and shield them from moisture and unwholesome ground air. If light and well-constructed, they supply additional room for storage of fuel and supplies; a location for toilets, and for play rooms where directed exercises, games, and gymnastics may be held during inclement weather.

The condition of repair found in the buildings visited was exceedingly unsatisfactory. Wooden steps as approaches to buildings are very common and in most cases were found broken or with boards missing. The majority of schools are not painted, inside or out. Blackboards are unfit for use, cracked and shiny and broken in many

places. Shades are torn and hanging half off the rollers. Window glass are broken, and a general appearance of neglect, misuse, and lack of care is prevalent in the counties visited. It may be added, that not all of these bad conditions are due to lack of money. Often failure to make buildings wholesome and attractive is due more to lack of intelligence and vigorous supervision than to lack of money. Opportunities are not always utilized, because definite guidance and suggestion are wanting. Ideals on the part of supervisors and teachers are as necessary as money.

Deplorable condition of outbuildings.—Outbuildings are an important and necessary part of the school plant. Wood and coal sheds which might well replace the disfiguring piles of fuel in the halls, around the stoves, and under the house would add to the appearance of a large number of schools. A schoolhouse with no basement is unsightly in itself and is much worse in appearance if made the storehouse for unused and broken desks, chairs, and the like and made to serve the purpose of coal and wood house in addition.

THIS CONDITION REQUIRES IMMEDIATE ATTENTION!

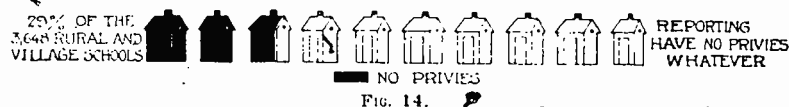


FIG. 14.

The committee is convinced that school officers and the people of rural districts in Alabama have not a full appreciation of the importance, both morally and physically, of furnishing schools with toilets which are and can be kept clean and sanitary. The data collected from the teachers show in itself a serious condition. Yet observation proves that the real situation is even worse. Many of the toilets reported do not comply with the simplest requirements of decency and privacy. Some of those which furnish shelter are in a condition altogether indescribable. Outside toilets are objects of degradation for the rowdies of the community and even for the boys of the school. Obscene markings add to the conditions of filth. Many teachers questioned about the care of the toilets answered that they themselves had not visited them, and they had not been cleaned during the school year.

In one county in which new toilets had been installed, which were therefore in fair condition, no pits had been dug nor any provision made for the use of chemicals. Such conditions become in a few months a menace to the health of the children and the community. Authorities concede that no permanent relief may be looked for from hookworm or typhoid fever until sanitary toilets are used. If

these were not supplied in the homes, as so many teachers explained, the matter is of still greater importance. It should be remembered that a good, sanitary, decent toilet system if installed in the schools will in time improve standards in this respect for the homes. When necessary, children should be taught the proper upkeep of toilets. It is a good lesson in health and community civics. Whatever neighborhood conditions may be, the schools, in order to set standards of decency and decorum, must have toilets which are above reproach.

Condition of cleanliness and order in the schools.—It is difficult to think of educating children except in surroundings that exemplify the cardinal virtues of cleanliness and order. One can not conceive of teachers and children sitting in the midst of dirt and disorder and accomplishing anything even in the fundamentals of an elementary education. Yet this was found almost universally in the school-rooms visited throughout the State. The visitor is repelled by the condition of the room, almost to the exclusion of unbiased judgment of the quality of the instruction. Sweeping is often done by the children during the recess or noon hour. Sometimes the visitor waited outside the building for the process to be accomplished. Sweeping mixtures, oils, dust cloths, etc., are not used to any extent. Sweepings are frequently left under stoves, bookcases, or other convenient pieces of furniture. Corners were full of dust-collecting trash. Bookcases, and sometimes teachers' desks, were piled with debris.

The following from an observer's notes is an example of a very prevalent, if not typical condition:

A bookcase relatively new contained books in disorder, and of two glass doors, one was broken. On top, covered with dust, were the following: A globe, a phonograph record, an old salt box, two books, three old half-used notebooks, a glass with faded flowers and a little water, a plate, a tin pail, a torn shade, a chalk box, a screw driver.

Unfortunately, carelessness of this kind is not confined to untrained and inexperienced teachers. Graduates of normal schools and the higher institutions of the State were among the worst offenders. Members of the committee visiting these institutions found little encouragement for the expectation that teachers graduated from them would establish better conditions or instill higher ideals in this respect. Rural schools can not touch the lives of children nor train a generation of people who appreciate better living for country folk if the schools continue such gross neglect of these matters which lie at the foundation of education and refined living. Moreover, considered only from the physical side, dust is the abiding place of germs; and, when stirred up in clouds during the school day or left to accumulate in unused places where a breath of air may lift it to the breathing line, it becomes dangerous to health.

The classroom.—The modern schoolroom is a workshop, a study, and a living room. It should, therefore, be a pleasant place to work in, should have books and materials for study, and should be as beautiful to live in as a favored home. Not that it should be like the

SOURCES OF WATER SUPPLY IN 3,648 ALABAMA RURAL AND VILLAGE SCHOOLS

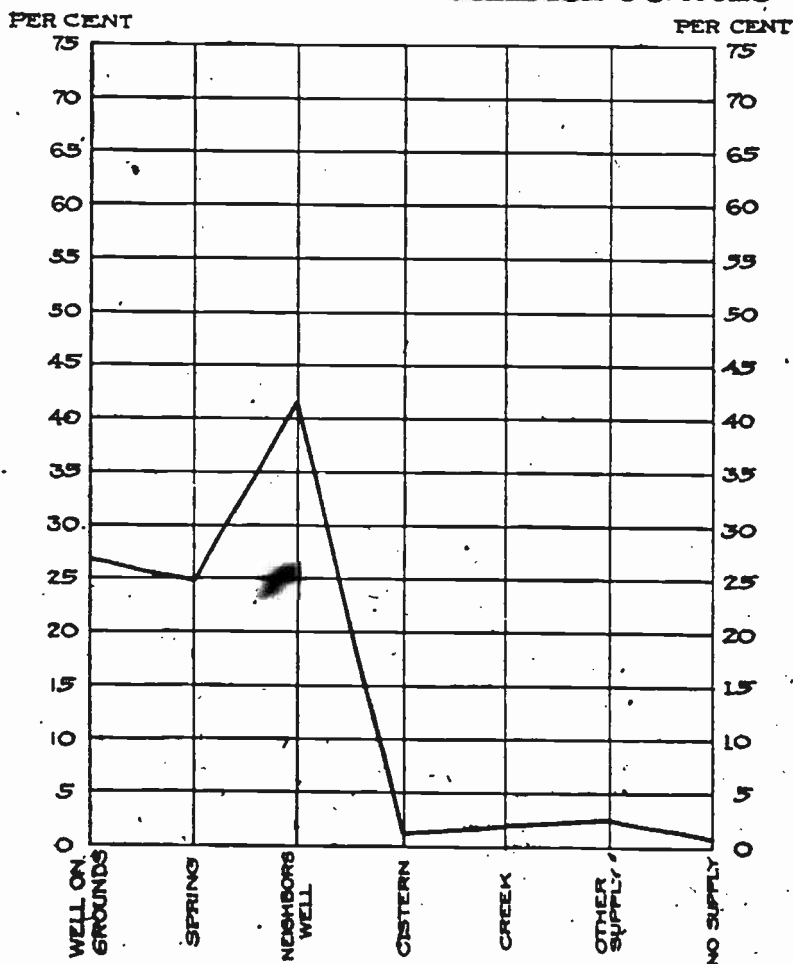


FIG. 18.

home, but is well adapted to its purposes. The classroom furnishes the immediate background for instruction and conditions its quality as much as the personality of the teacher.

Besides a clean room, well aired, lighted, heated, and made comfortable, a minimum amount of equipment is necessary. Good seat-

ing arrangements should be furnished; adjustable desks are best; others should be fitted to the size of the children they accommodate. There should be a good globe; such maps as are needed to illustrate the subject matter studied; supplementary and reference books suitable to the grade; good blackboards, properly placed; illustrative and handwork materials; and at least one unabridged dictionary, even if the children are supplied with smaller ones at their desks. The committee found the schools in the State very poorly equipped, judged by the above—a very modest standard. Slate blackboards were found in one school only. Some counties are placing a fair quality of boards such as hyloplate and beaver board in all the schools. This at least should be required if better ones can not be obtained. The shiny, unpainted, worn and broken boards, commonly found, are a severe test to the eyes of the children, and can not be used effectively by the teacher. In many cases the children are housed in large rooms suitable only for halls, with a blackboard on the stage too far away to be seen by the children. This in itself renders the building unfit for use. There is a great need throughout the State for a far more liberal allowance for all equipment, particularly good blackboards.

Globes and maps are very necessary, and are rarely found in the schools. Less than 10 per cent were supplied with both. Observers found teachers teaching latitude and longitude without globe, map, or blackboard. Sometimes none were supplied. Sometimes teachers were so unaccustomed to the use of material that they tried to teach all subjects without illustration. Supply closets, supplementary and reference material are almost entirely wanting. Even schools with State libraries have no supplementary readers or the most necessary reference books. In some schools in which secondary grades are taught there is fair equipment for manual training, cooking, and sewing, and a laboratory for agriculture and chemistry, but no globe, map, dictionary, or encyclopedia for the elementary grades. In one school a seventh grade class in geography was observed studying the comparative size, climate, and surface of the European countries and the United States; no reference material of any sort or globe or map was at hand. There was, in the same school, a so-called "school library" of several hundred books, good bookcases, and office furniture valued at \$450. The committee does not wish to imply that libraries and office furniture are not important and valuable. It wishes to suggest the necessity of intelligent selection and the importance of using good judgment in securing supplies and equipment—the simple and most necessary things first.

Daily attendance in the rural schools.—Something of the effectiveness of a school system may be judged by the extent to which it is utilized by those for whom it is intended. A well organized and administered system will enroll a large percentage of the school popu-

lation and keep them in regular attendance throughout the school term. To this end the school organization, compulsory attendance law, and popular interest contribute.

As one measure of daily attendance the committee noted in a large number of schools in each of the counties visited the actual membership of the school at one time and actual number present on the day of the visit. The result is shown in Tables 13 and 14. It is apparent that in many cases the absentees outnumber those present. The data were collected at a time of year when there was every reason to expect children to be present. Near the close of the term parents and children know that promotion depends on constant attendance. The excuse of helping with farm work offered in many cases is untenable and entirely insufficient to explain absence among smaller as well as larger children and in nonfarming as well as farming communities. Of course, teachers, however good, can not achieve results unless children attend school with reasonable regularity.

Classroom instruction.—The committee observed several hundred teachers at work in all parts of the State. Of these, 70 per cent were practically untrained. While many of those included in the above had had some normal training, it was not enough to influence their teaching in any marked degree. Approximately two-thirds were teaching for the first time in the schools in which they were visited. The majority had some teaching experience, but it was obtained in most cases in unsupervised systems, and was therefore as apt to be useless or even harmful, through the establishment of incorrect habits of procedure, as valuable.

While the final test of the efficiency of any school is found in the quality of the classroom instruction, one must keep in mind, in judging it, the contributory circumstances which condition it. Among rural schools there is practically no supervision worthy of being characterized as professional. The teachers must depend for association, inspiration, and encouragement on the people of the community, and for educational ideals and methods entirely on themselves. Under such conditions much can not be expected except from highly trained, efficient, and experienced teachers of which there are very few. Classrooms are as above described with little equipment, and presenting an appearance of general disorder and carelessness. The teacher in the typical Alabama rural schools may justly be compared so far as surroundings are concerned to the farm house keeper, isolated socially and spiritually and without modern conveniences or ideals of living. Under such circumstances work which should be pleasant and inspiring becomes dull drudgery. There are, of course, some exceptional conditions and exceptional teachers, but the system as a whole must be pictured as described.

The spirit of the teaching force is not above what one would expect to find in such surroundings. Indeed, it is doubtful if teachers with proper ideals and self-respect would tolerate the conditions observed. Cleanliness, at least, is always possible. The teaching corps as a whole lacks ideals, energy, aggressiveness, and that inspiring attitude, which, when it exists, compensates in part at least for the lack of professional and scientific qualities in the methods of teaching. One may be capable, interested, and interesting in his work, anxious to avail himself of every possible means to become a better teacher, obviously watching for and profiting by his own failures, even though he lacks professional training, skill, or an education adequate for the needs of the schoolroom. This is the thing, which, for want of a better term, called professional spirit, one misses even more than the lack of training on the part of the teacher. The school day is a monotonous routine of formal memorizing of lessons. There is no interest, inspiration of vision, beyond the completion of the formal day of hearing recitations.

It is practically useless and impossible under such circumstances to discuss the instruction observed in relation to fundamental principles of teaching. Modern ideas and methods are quite disregarded, and do not apparently enter into the consideration of the majority of teachers. The recitation is a lesson-hearing process in which the pupil is expected to memorize the material found in the textbook and repeat it. In many cases the teacher is himself unfamiliar with it, and entirely unprepared either as to subject matter or methods of instruction. He merely attempts to follow the text closely enough to find out that the pupils' effort is either successful or unsuccessful. The result is approved or disapproved without much spirit, and no incentive to do better or help in ways of doing it are given to the pupil. Assignments observed were always by pages or lessons. Discussions or explanations of causes were rare; interruptions by the children at their seats frequent; drill lessons were slow and monotonous; reading expressionless and apparently not understood by the readers or of interest to them. History was simply reading the textbook, often very poorly, or memorizing it. Geography followed the questions in the book, and grammar was the learning of a few definitions in book terms.

Neither story telling, dramatization, music, art, physical education, nor any sort of industrial or vocational education was found except in one county. Oral work as a method of teaching language and literature was not observed. There was no silent reading, though this is more important than oral reading. The value of illustrative material, of seat and industrial work, and of correlation among subjects is entirely overlooked. These are mentioned merely as examples of

the omissions, with no attempt to enumerate them all. Discipline, in the sense of preservation of an atmosphere of work rather than one of idleness, is very poor. School tasks are accomplished not so much in the spirit of joyous work or play as in the spirit of drudgery. Idleness among children not reciting is prevalent. The kind of teaching which leads to the cultivation of initiative or encourages the use of judgment is rarely found. Discrimination between items of importance and those of little value is not common even among teachers. There is practically no effort to teach it or to help the children to interpret and learn through the things of immediate interest in their surroundings. Teachers were rarely able to give the pupils help in regard to better preparation for the work of the next lesson. The observer left most classes with a deep-seated impression that the teachers had given little thought to methods of instruction other than those concerned with memorizing the material found in the various textbooks used.

One unfortunate circumstance which leads to lack of professional spirit and interest is the itinerancy of the teachers. This, of course, is not confined to Alabama, but it is accentuated here by low salaries, poor buildings, the general lack of interest, and failure to provide proper equipment. The notes of one observer show that 68 per cent of the teachers in one county observed were teaching for the first time in their respective positions. Naturally, there is little tendency to establish a reputation when one moves about constantly.

The rate with which children are promoted and the rapidity and success with which they progress through the grades show that the plan of organization, the course of study, and the quality of the teaching which prevail need fundamental change and improvement. The promotion rate is much lower than it should be, especially in the lower grades and the rate of retardation is excessive. See Table 15. General school experience and the testimony of the teachers as well as observation convince the committee that irregular attendance is a leading cause. This is due, in part, to the fact that the attendance law is inadequate and poorly enforced, but by no means wholly to this cause. A very general lack of school interest, poor teaching, and a course of study not practical enough in its appeal to the interests of the community and the children are more determining influences. Permanent improvement must come through a general toning up of the system in all directions. Unfortunately, the teachers are not always careful to set an example of regularity and promptness. Rooms are generally in disorder. Programs are not complied with. Recesses are given when convenient instead of at the regular periods. Such irregularities as these were commonly observed by the committee. Such laxness of organization and maintenance does not add

to the respect which the people have for the school, nor aid in their sympathetic cooperation toward a more vigorous enforcement of the compulsory-attendance law.

Proposed reorganization of school grades.—The schools of the State are organized on the basis of 7 elementary and 4 secondary grades. The aim of this organization is apparently to cut the usual 12-year course 1 year and accomplish practically the same amount of work. Very few of the newer subjects, such as music, drawing and vocational arts, recreation, and the like were found in the rural courses. The county high schools in many instances offer vocational agriculture, home economics, and manual training. Industrial and commercial subjects are not given. The secondary work is of the old formal type, e. g., 4 years of mathematics was found very generally. Often the one-teacher schools include in their courses 8, 9, and 10 grades.

Naturally the work is badly done, not only in the upper grades, but throughout. Forty-minute periods for the high-school classes mean all too many 5, 10, and 15 minute periods in the elementary classes. The division of grades and work among teachers is entirely unequal, and in favor of the high-school pupils, who are always fewer in number, but whose demands on the teacher's time for both preparation and recitation are correspondingly greater. As an example of this tendency, a case may be cited, of a one-teacher school, including 8 grades, in which the visitors heard a 30-minute recitation in Latin with one pupil. Few of the teachers of high-school subjects visited were prepared for high-school work. To give one illustration, a principal of a 10-grade school visited, who happened just then to be conducting a class in geometry, was a "graduate" of a 10-grade school and of no higher school. Similar instances are not uncommon.

Under these conditions good school work can not be expected. The pupils in the high-school grades were usually found struggling with topics in arithmetic and formal grammar, which should have been mastered in the seventh grade or below. One class observed, "juniors" in a school offering four years of secondary work, were responding poorly to the teacher's efforts to explain how to differentiate among simple, complex, and compound sentences. The physics classes observed in schools of this kind were all of the textbook variety. No equipment for science was found outside of county high schools, and often very little in these. In fact, this type of organization lends itself to superficial work all along the line.

Other indications of the need of reorganization and a new course of study are found in the age-grade data compiled in Tables 3, 4, and 5. Not all overage children are necessarily retarded, but a large percentage of them are. The unusual number of these children in Alabama is due in part to poor attendance, as has been explained.

However, this does not account for all of it nor for the low rate of promotion. The latter is especially serious in view of the fact that attendance drops off so heavily at the close of the term, and classes therefore consist of selected pupils among the total who should be in the grade. Again the promotion rate is lower in the first than in any other grade, reversing the normal order. There is very little reason for nonpromotion in the lower grades. Its existence to so great an extent in Alabama is due in part to the fact that end-of-the-term absentees and irregular attendants must go back to the beginning and repeat the whole instead of part of the work of the grade. It follows that such children rarely stay in school long enough to complete the whole course. Again, if the system were elastic and adaptable enough to accommodate itself to the individual needs there would be a larger group of accelerates. The proportion is pitifully small. It can not be that there are so few really capable children. It must be due to too much rigidity in the organization and a course whose requirements are not fitted to the interests or ability of the children.

The six, three, and three plan.—The committee recommends that the present 7-4 year plan be abandoned, and the 6-3-3 plan be adopted. The first six years for the elementary grades, the following three for the junior high school, and the final three years for the senior high school. No one or two teacher schools should now attempt more than the 6 elementary school grades; later four teachers might be required for any school having 9 grades. The junior high school may be established in schools which are large enough to employ four or more teachers. They should be so located that children in the country too far to walk may be transported in wagons or motor trucks. The distance for transportation may be somewhat greater than is feasible when transporting the younger children of the elementary grades. The equipment necessary for efficient junior high-school work is simple and inexpensive. The larger buildings now in the course of construction and the modern ones of recent construction are appropriate and adequate in most cases or can easily be made so.

The senior high schools will require more equipment and teachers who have at least four years of college training, and who have majored in the subjects they expect to teach. Some such teachers are needed also in junior high schools, but graduates of class A normal schools will be eligible as teachers for the greater part of this work. One or two senior high schools will be sufficient in the majority of counties and will probably be as many as one county can afford to equip and maintain on an effective basis. Senior high schools should, by all means, be located as favorably as possible for easy access from all parts of the county and the board of education should make such arrangements as are necessary to transport or

house students from remote portions of the county. A suggestive plan for the organization of a county on the 6-3-3 basis is pictured in figure 16.

A new and quite different course of study will be necessary in order that this plan may meet its full possibilities. The first 6 grades will as now be concerned chiefly with the fundamentals. Topics for teaching purposes should be organized in relation to and from the point of view of the experiences and environment of the children from rural Alabama. The course should not ignore, as it now does, the distinctly modern phases of education. Music and literature, the fine and industrial arts should be taught with emphasis on appreciation. Nature study, elementary agriculture, and school gardening, play and recreation, sanitation and hygiene, some form of industrial work or sewing, dramatization and story telling should all have generous provision in the course. It should aim especially to be helpful to teachers in the organization of subject matter and methods of teaching. Among other things, it should impress upon them the idea that memorization of the textbook is not the aim of school education. This familiar textbook tendency is a serious matter in the State. It may account, in some measure at least, for the lack of vital, aggressive interest felt by the public in the schools.

The course should set up ideals and standards and be definitely and specifically planned to meet conditions as they exist in the schools and communities of the State. It must be revised frequently as conditions change and materials are tried and proved in the school-room. It should be elastic enough to permit of free adaptation and supplementing under the direction of county supervisors. A good course of study is the result of constantly conducted and directed experimentation on the part of teachers and specialists in subject matter and methods.

The junior high school grades should include some electives, but because children at this age are not yet mature enough to decide for themselves, the list of required subjects should be long and that of electives short. The latter may be increased the second and third year. The required subjects in the junior high school should include at least three years of English, two of mathematics, three years of history, including European beginnings and advanced American history, one year of civics and community civics, one year of geography and elementary science, three years of physical education, one year of hygiene and sanitation, and three years each of music, art, and current events. It may also include some of the following, the remaining ones to be offered as electives: Home economics, industrial arts, agriculture and one or two other sciences, animal husbandry, vocational guidance, commercial subjects, Latin, and two modern languages. The senior high school

course should continue the vocational and academic courses begun in the junior high school, with a higher degree of specialization in view. All senior high schools should prepare for college and give some degree of preparation for the chosen vocational field.

IDEAL ORGANIZATION OF PORTION OF A COUNTY

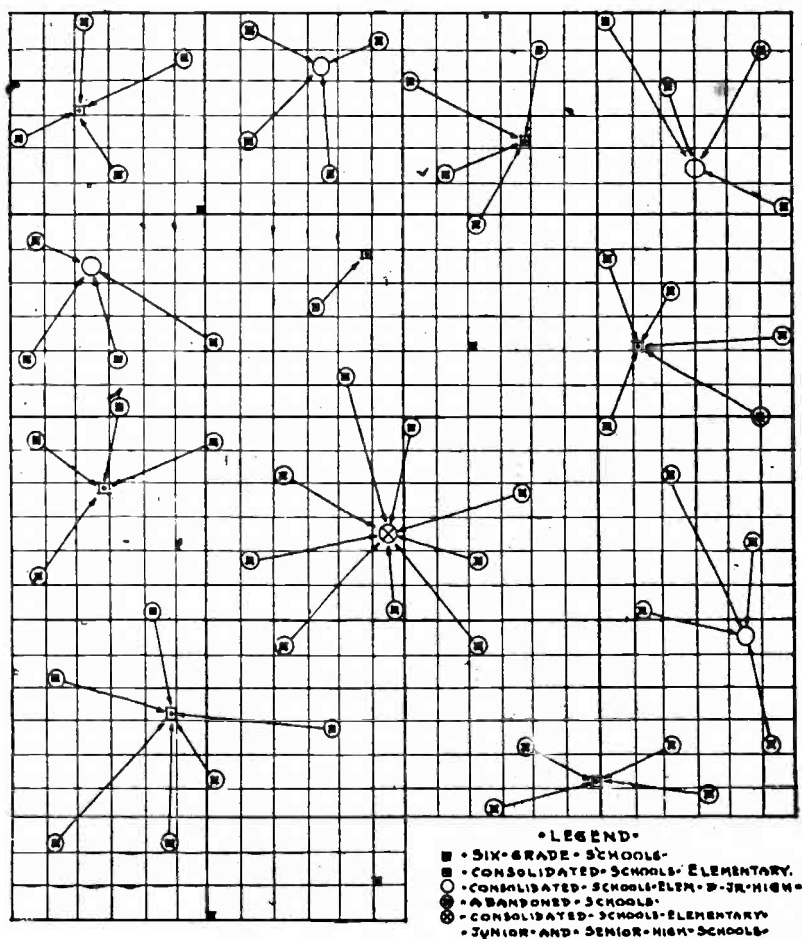


FIG. 16.

Progress in school consolidation.—Progress in school consolidation in Alabama began with the new law for the county unit of administration enacted in 1915. Prior to that time consolidation of schools and transportation of pupils were confined to two counties, Mobile and Sumter. This law gives to county boards of education full authority to fix boundaries of school districts, locate schools, provide

for transportation of pupils, and engage teachers. Since its passage at least one consolidation has been effected in each of 48 of the 67 counties. Seven counties, Conecuh, Escambia, Jefferson, Lauderdale, Madison, Montgomery, and Monroe, have made notable progress either in the number of consolidations actually accomplished, or in the adoption by the county board of a program outlining plans for the future. Among the best consolidations may be mentioned Five Points, in Chambers County; Pike Road, Montgomery County; Riverton, Madison County; Alliance and Corner, Jefferson County; Marbury, Autauga County; Wagarville, Washington County.

There are at present 208 consolidated schools in the State, of which 141 are in the open country, 58 in rural villages, and 9 in towns and cities.

The school farm or experimental plot has as yet gained little headway as a part of the school plant in Alabama. The average area of land on which consolidated schools have been erected is four acres. Only 2 per cent have additional acreage for farm purposes. However, a movement is under way which it is hoped will accomplish the purchase of larger plots. A few of the county boards are insisting on the donation of larger tracts as one consideration for the location and erection of consolidated school buildings.

Practically all buildings are wooden structures, built according to the State plans. The funds are obtained by public subscription raised in local communities, supplemented by State aid. A few, 32 per cent to be exact, have separate auditoriums. The number supplied with live stock, farm machinery, and equipment for agriculture, home economics, and shop work is negligible. Only 12 are supplied with teachers' homes, each of which is erected on the school grounds, and occupied by a principal engaged for 12 months. Better plants are difficult to obtain under present conditions since there is no legal way to issue bonds or interest-bearing warrants to obtain money for use in constructing and equipping buildings.

Transportation is provided in the majority of the consolidated schools. It has proved satisfactory in all cases to parents and teachers. Here, as elsewhere, it reduces tardiness and encourages better attendance. At present there are 123 transportation wagons conveying 2,001 children daily. The average distance is four and one-tenth miles and the average daily cost is 14 cents per pupil. There are 123 drivers employed, 88 of whom were selected by means of competitive bids. They receive, on an average, \$59 per month. Eighty-three or two-thirds of the transportation vehicles are owned by private individuals, usually the drivers. Forty-one, the remaining third, are owned by the boards of education. Bonds are not required except by about 25 per cent of the employing boards. The amount of the bond required is usually \$200.

Unfortunately, exact data concerning education, salaries, tenure of teachers, length of term and attendance are not obtainable because records have been kept only since 1917. Such information as can be obtained indicates that teachers with more experience and with better academic and professional training are employed since consolidation. In Mobile County the length of service of teachers employed under consolidation is four and eight-tenths years, while under the old system it was one and four-tenths years.

The length of term in consolidated schools has increased 25 per cent as compared with the old system. The average salary of principals has increased from \$560 to \$990, and of teachers from \$350 to \$540. The increases are due both to lengthening of terms and higher salaries. The increase in enrollment in the new over the old system is 12.5 per cent in counties from which data are obtainable.

The committee believes that the outlook for extending consolidation in Alabama is very good. The laws are favorable, the county boards as a rule are alive to its value, and the people are appreciative of the possibility of obtaining better school facilities for their children through consolidation than in any other way. The State is an ideal one so far as climatic conditions are concerned, the people not distributed over a large territory, but concentrated in communities to a great degree, and the farmers are in need of the social and economic influences exerted by the best consolidated schools throughout the country. The great need is for money enough to equip and maintain satisfactory buildings and to pay capable teachers. Teachers' cottages should be built to a far greater extent. The difficulty of securing comfortable, convenient, and pleasant boarding places is discouraging to good teachers. So far as the general disposition of communities and appreciation of school officers is concerned, the consolidation idea is gaining headway in Alabama. As soon as schools can be better financed the State should make rapid and progressive strides in this particular.

Recommendations for improvement of rural school conditions.—In addition to the recommendations offered elsewhere in this report concerning special matters and particular counties the following are of general application:

(1) Consolidation should be encouraged through State aid. This should be provided by the State board from the funds at their disposal when division is made as recommended in another chapter of this report. A liberal amount should be set aside for this purpose and a continuing appropriation for teachers' salaries should be made.

(2) The employment of assistants to the county superintendent in the supervision of rural schools should be encouraged from the same fund. A bonus should be offered of probably \$500 to each supervisor, with the regulation that this amount should not exceed one-third of

the total salary, the remainder to be paid by the county board of education.

(3) Minimum qualifications, educational and professional, should be established through the enactment of the minimum salary law recommended in another chapter. Graduation from class A normal school or equivalent education and training should be required. This standard may be approached gradually and will not be retroactive.

(4) The school sites, size of ground, kind of building, and equipment supplied should be subject to the approval of a State school architect appointed by and acting under the direction of the State board of education. No State funds should be supplied unless the minimum requirements exacted by the State board are fulfilled.

(5) The State board of education should arrange for the reorganization of the school system on the 6-3-3 plan as described in this chapter, and should supervise the formulation of a course of study adapted to this form of organization. This course should be prepared by specialists in subject matter and methods and teachers. It should admit of adaptation and supplementing to fit the needs of different counties and communities.

TABLE 13.—Attendance on day of visit.

Counties.	Enrollment.	Present.	Per cent.
Jefferson.....	1,700	1,111	62.06
Colbert.....	624	371	59.45
Escambia.....	609	403	66.38
Bullock.....	499	395	79.15
Total.....	3,622	2,280	64.45

TABLE 14.—Attendance record of approximately 1,500 children in two counties.

Group I.—TOTAL NUMBER ATTENDING, 719. NUMBER ATTENDING LESS THAN 100 DAYS, 378, OR 52.57 PER CENT.

Days.	Children.	Days.	Children.	Days.	Children.
1 to 10.....	35	66 to 70.....	17	126 to 130.....	10
11 to 15.....	10	71 to 75.....	28	131 to 135.....	19
16 to 20.....	16	76 to 80.....	27	136 to 140.....	11
21 to 25.....	21	81 to 85.....	27	141 to 145.....	3
26 to 30.....	11	86 to 90.....	33	146 to 150.....	8
31 to 35.....	14	91 to 95.....	28	151 to 155.....	17
36 to 40.....	18	96 to 100.....	26	156 to 160.....	19
41 to 45.....	13	101 to 105.....	26	161 to 165.....	20
46 to 50.....	12	106 to 110.....	26	166 to 170.....	24
51 to 55.....	20	111 to 115.....	18	171 to 175.....	42
56 to 60.....	14	116 to 120.....	51	176 to 180.....	40
61 to 65.....	8	121 to 125.....	7		

Group II.—TOTAL NUMBER ATTENDING, 751. NUMBER ATTENDING LESS THAN 100 DAYS, 356, OR 47.66 PER CENT.

Days.	Children.	Days.	Children.	Days.	Children.
1 to 10.....	36	66 to 70.....	18	126 to 130.....	18
11 to 15.....	14	71 to 75.....	24	131 to 135.....	16
16 to 20.....	21	76 to 80.....	19	136 to 140.....	23
21 to 25.....	14	81 to 85.....	19	141 to 145.....	27
26 to 30.....	11	86 to 90.....	18	146 to 150.....	27
31 to 35.....	32	91 to 95.....	24	151 to 155.....	28
36 to 40.....	17	96 to 100.....	24	156 to 160.....	37
41 to 45.....	17	101 to 105.....	30	161 to 165.....	19
46 to 50.....	17	106 to 110.....	29	166 to 170.....	31
51 to 55.....	9	111 to 115.....	22	171 to 175.....	26
56 to 60.....	19	116 to 120.....	19	176 to 180.....	19
61 to 65.....	5	121 to 125.....	22		

TABLE 15.—Promotion and failure record of 2,000 children in rural elementary schools.

Grade.	Number in class at end of term.	Number promoted at end of term.	Per cent promoted at end of term.	Number in class at end of term.	Number promoted at end of term.	Per cent promoted at end of term.	Number in class at end of term.	Number promoted at end of term.	Per cent promoted at end of term.
1.....	85	54	56½	97	70	78	32	21	65
2.....	66	47	71½	72	52	72	37	24	65
3.....	52	43	82½	54	50	93	30	21	70
4.....	71	59	83	42	38	90	26	19	70
5.....	69	51	77½	40	36	90	22	16	74
6.....	63	47	74½	35	31	89	22	14	64
7.....	54	44	81½	34	27	79	16	9	56

TABLE 16.—Summary of age grade data for the State.

Schools.	Number normal age.	Number under age.	Number over age.	Total.
White schools—Places below 2,000 population.....	17,422	2,066	18,754	38,232
Per cent.....	45.58	5.37	49.05	
White schools—Rural.....	35,105	5,400	52,731	93,236
Per cent.....	37.65	5.79	56.55	
Bullock County.....	103	1	106	210
Per cent.....	49.04	.47	50.47	
Colbert County.....	654	89	1,229	1,872
Per cent.....	26.59	4.75	65.65	
Jefferson County—100 white schools.....	4,253	1,387	7,257	12,877
Per cent.....	33.02	10.61	56.35	

TABLE 17.—Tenure of service among teachers visited by the committee (time in present position).

Counties.	One year.	Two years.	Three years.	Four years.	Five or more years.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Colbert.....	68.75	18.75	12.5		
Jefferson.....	66.66	22.22			11.11
Bullock.....	00	20	8	4	12

Chapter VIII.

SOME TYPICAL ALABAMA COUNTIES.

The plan of the State survey contemplated an extensive investigation of conditions in all of the schools, chiefly rural, which are under the jurisdiction of the county boards of education. This was accomplished through: (1) General observation on the part of the committee throughout the State; and (2) special intensive studies of conditions in selected counties. These are shown in the map accompanying the chapter. The result of these studies is given in the following pages. There is in each case a brief survey of school conditions as they are, and certain recommendations based on these, which, if followed, will in the opinion of the committee result in improvement of the schools.

The counties were selected as typical of certain economic and industrial conditions and occupations characteristic of the State as a whole or of a large section of it. Since school conditions correspond to and are influenced by these it is believed that the recommendations given and the suggestions offered for each county and the group as a whole will be suggestive to other counties in the State. Moreover, the committee has endeavored to emphasize in connection with each county the distinctive accomplishment which has been or is being made therein and suggestions for consistently carrying into effect this and other ideas. Throughout the chapter certain ideals are set forth and certain recommendations are made which will be as suggestive to other counties as they are to those for which they are given. School officials may study them and in the light of their own conditions adopt such as will be applicable.

I. MONTGOMERY COUNTY.

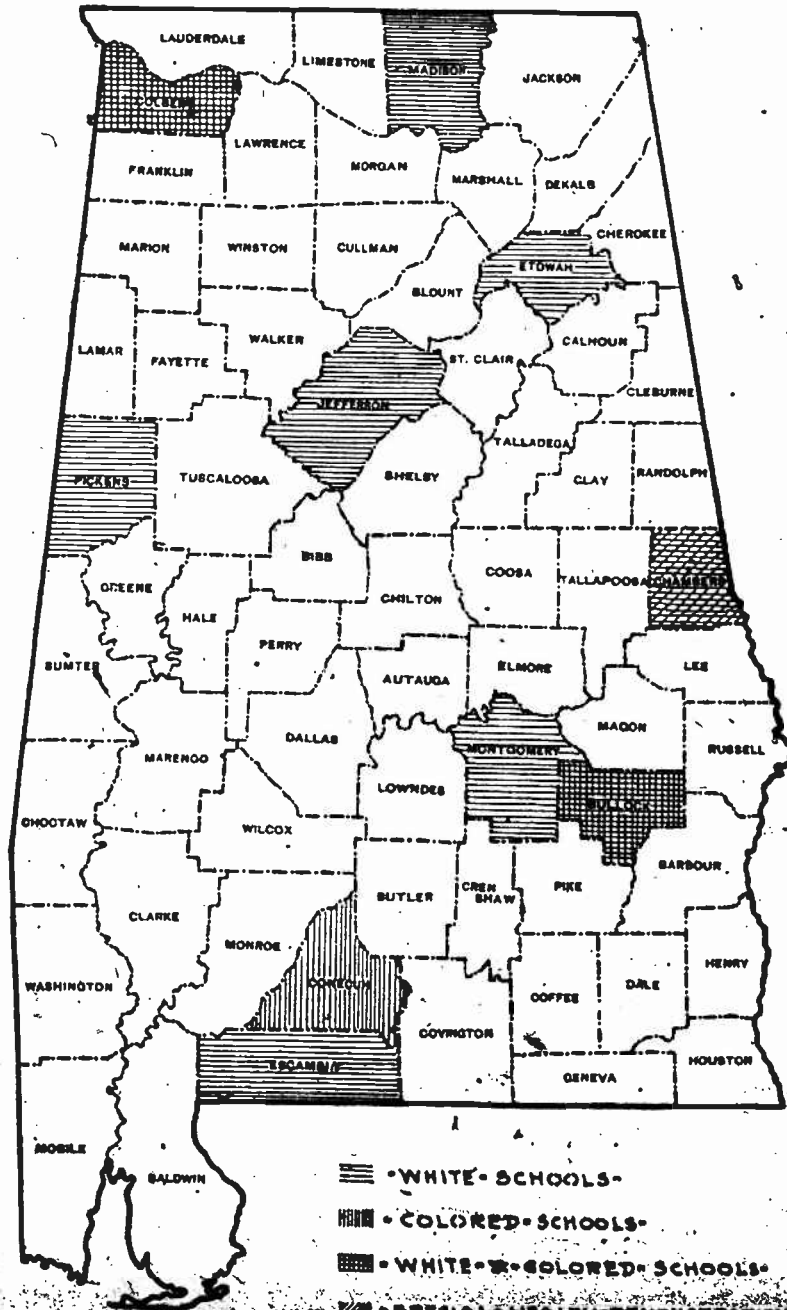
Montgomery County has just begun a complete reorganization of its entire rural school system. It is included among those selected for special study because it illustrates what can be done with ample funds when administered in an efficient and business-like manner. It is also worthy of emulation on the part of other counties in the State in which conditions are similarly undeveloped and in which the idea of school consolidation as a county policy has not taken root.

In 1917 Montgomery County was a striking illustration of the deplorable conditions that prevailed over a large section of the State before the effects of the recent progressive legislation began to be

SOME TYPICAL ALABAMA COUNTIES.

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felt. The county, outside of the city of Montgomery, was obliged to depend wholly on the meager State appropriations for maintenance of its schools. Unfortunately it had long suffered from the effects of a political county superintendency, as appears most strikingly from the following summary¹ of conditions as they prevailed when Dr. W. F. Feagin resigned the office of State superintendent of education to accept the no less important office of county superintendent, swayed, no doubt, by a desire to show what might be done in Alabama under right conditions. And what better illustration can one desire than this to illustrate the effect of the new effective county organization law in contrast with the old political régime.

Valuation of school property.—The total valuation of the 47 white schools outside the city of Montgomery was \$34,420, which was \$3,080 less than one-half the value of the Montgomery county jail and site and \$3,080 less than one-fourth the value of the courthouse, site, furniture, and fixtures.

The total value of the buildings and land was \$25,075 or one-third of the value of the jail and site, and one-sixth of the value of the court house, furniture, fixtures, and site. Of the \$34,420 invested in school property in the county, only \$15,665 or less than one-half belonged to the State and county. In other words, the value of all school property of those schools with titles vested in the State was \$5,335, or less than the cost of three of the best motor trucks used in constructing the county roads. The total value of all supplies and equipment, including musical instruments and libraries, was only \$5,875, or \$1,125 less than the cost of one motor truck used in building the roads of the county.

All school equipment in the county outside of the city of Montgomery was equal in value to less than one-seventh of that of the machines owned by the county and used in making the county's good roads. "Seven to one" was the ratio of the county's investment in equipment for *making roads*, as compared with its investment in equipment for *making men and women*.

General equipment of the schools.—The school equipment was of the meagerest sort. Thus, there was no equipment for teaching industrial work in any of the schools of the county aside from three oil stoves and two old work benches with not more than enough tools for one workman. Playground equipment was practically unknown. There was only one school in the county with any playground apparatus, and this consisted of an old swing and a giant stride. Four schools had tennis courts and one of them had a basket-ball court and baseball diamond. This marks the total of the equipment and conveniences placed at the disposal of the children.

¹ See *The Physical and Health Conditions of the Montgomery County Rural Schools for White Children*, a report to the county board of education, 1917.

Desks and teaching equipment.—There were 2,592 white children of school age in the county at the time the study was made. Of this number 1,928 were enrolled in the schools. It might, under strict enforcement of the compulsory education law, be possible to increase the number in attendance to 2,200. Of comfortable seatings there were in all 1,145 or just enough for about one-half if all the children were in school.

All kinds of desks were in use, home-made and purchased. In one school there were as many as 13 different kinds of desks. Only 19 out of the 47 schools were supplied with teachers' desks. In many schools not one-half of the entire number of desks were suited to the children seated in them. As may be seen in the accompanying photograph, little children were often seated at desks which were far too high for them, while others were obliged to use desks altogether too small. The teaching equipment was no better. Only seven schools, all told, were equipped with globes; only five had reading charts; either commercial or home-made; and although music has long been considered a part of the daily work of every school in the State, not a single school in the entire county was supplied with any kind of music chart or other means of instructing in the fundamental principles of this art.

Sanitary conditions.—The general sanitary conditions were almost beyond description. Only 2 of the 47 schools reached the standard requirements of 20 per cent of light (measured in area of window space); and 13 at 10 per cent or less. The light and exposure were generally placed without regard to health or comfort. Many of the schools had light from three directions, the front and two sides. Two buildings were properly ventilated, the others received their ventilation by means of doors and windows and through cracks and openings in the floor and walls of the loosely constructed buildings.

The water supply for the schools came principally from the open well of a nearby farm or from an untested spring in the vicinity of the school. All cistern water came from the top of the decaying school buildings and stood in open cisterns, often without being filtered. Eleven schools had water supply on the grounds, 10 were supplied with water brought in buckets from a distance. Many of the home wells from which water was secured are located near horse lots convenient for the watering of the stock, and insanitary in the extreme. The water surface of these wells range in depth from six inches in one instance, to 700 feet in another.

The condition of the school toilets beggars description. Three schools in the county had no toilets for either boys or girls. In these schools the children were obliged to use the woods, a situation often embarrassing, especially during the winter months after the

trees and bushes had dropped their leaves. Twenty-eight of the 47 schools had no kind of toilet or outhouse for the boys and, as in the case of the three instances mentioned above, the boys were obliged to find cover in the woods.

Effect of these conditions on the development of rural life in the country.—Such educational conditions as these just described are certain to react on the everyday social life of the people. It is impossible to separate the economic life of an agricultural population from its school life, which is expected to furnish the educated leadership of the community. Montgomery County boasts some of the best roads in the State, but the stimulus which resulted in their construction did not emanate from the country districts. It came from the city of Montgomery. Neither this nor any other rural county in the State can expect to organize a really satisfactory agricultural life before their houses educational have been put in order. The rich soil is here waiting for intelligent treatment; this the modern kind of agricultural community schools can provide—and these schools are now beginning to be erected in the county.

Voting the 3-mill tax the first step.—Montgomery County had first to be freed from the political superintendency with all that goes with it. Then it needed money, much money. When the constitutional amendments went into effect the way was cleared. After a vigorous campaign of education the city and outlying rural districts voted favorably upon the 3-mill tax. The larger per cent of the county tax is paid by the city of Montgomery. This is eminently fair, inasmuch as the city draws largely upon the surrounding rural communities for its sustenance. The whole people of the county thus indorsed the pending reorganization of the schools.

Plan adopted for rebuilding the entire school system.—Map 5 above gives the location of all the schools of the county in 1917, 41 of which are white and 71 colored. The white-school population is comparatively sparse, so that a genuine community organization could be realized only through school consolidation. The colored-school problem, on the other hand, is not one of consolidation, but rather one of enlargement and reconstruction of the present school plants. The colored population is large and well distributed over the county; their schools are included in the reconstruction scheme, but the present plan contemplates rebuilding the white schools first.

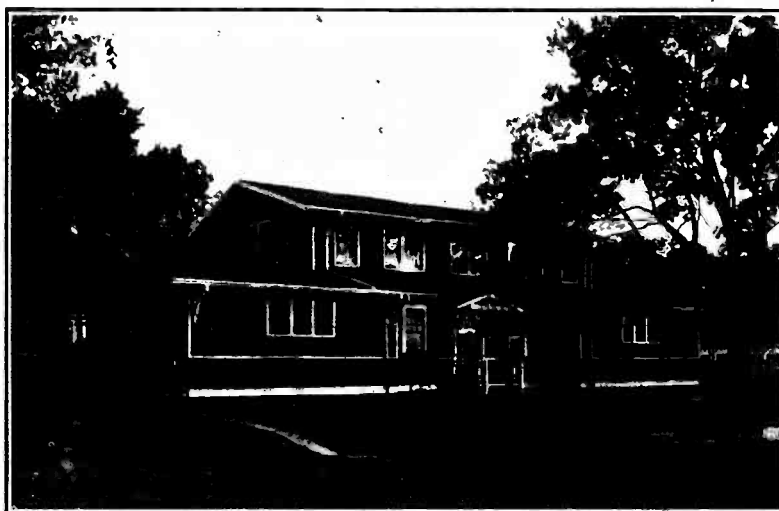
The reorganization under way.—The map shows graphically how the work of reorganization is proceeding. One splendid school has just been organized at Pike Road which provides excellent educational facilities for about one-sixth of the area of the county. A similar school is now being erected at Pine Level. This will receive the white children from a second one-sixth of the county. These two schools will thus provide school facilities for all the white chil-



A. LOWNDES COUNTY TRAINING SCHOOL FOR NEGROES.

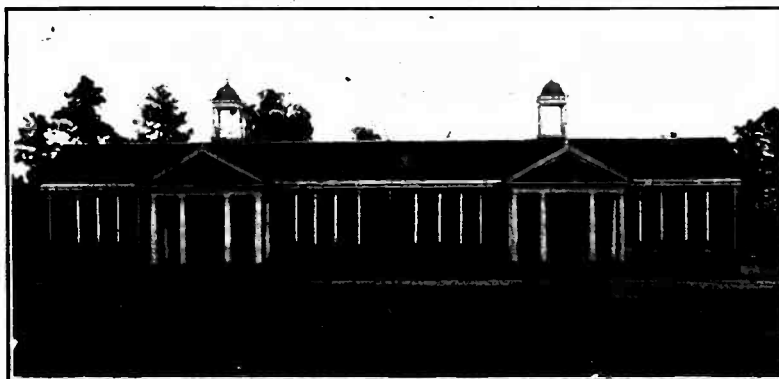


B. ESCAMBIA COUNTY TRAINING SCHOOL FOR NEGROES, AND TEACHERS' HOME.



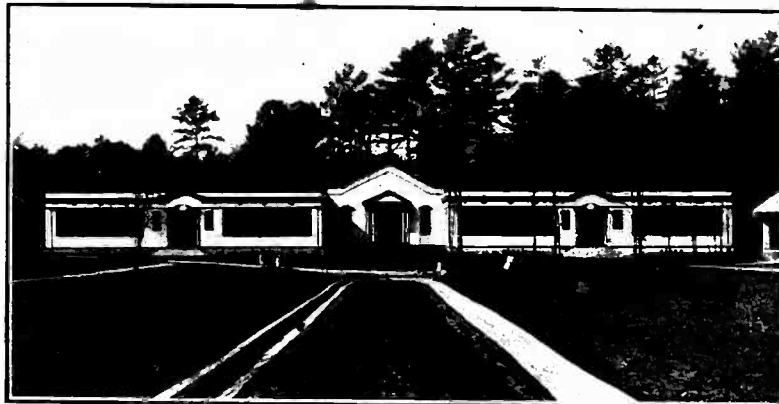
A. SCHOOL AT MUSCODA.

An attractive building belonging to the Tennessee Coal, Iron & Railroad Co.

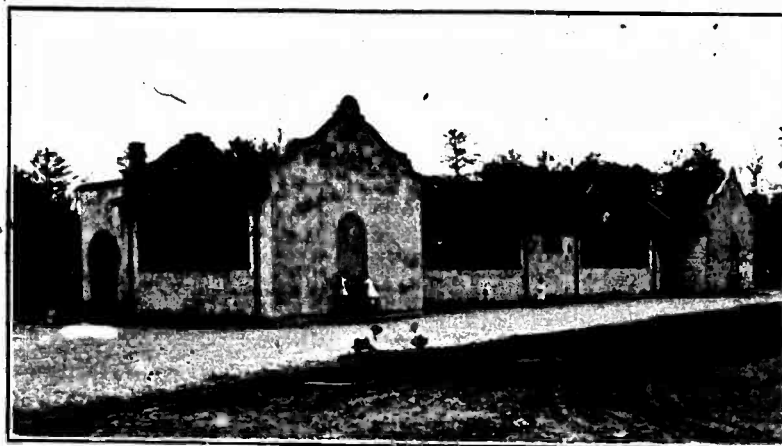


B. SCHOOL AT DOCENA.

A good modern structure erected by the Tennessee Coal, Iron & Railroad Co.



A. ATTRACTIVE SCHOOL BUILDING AND GROUNDS AT BAYVIEW; OPERATED BY THE TENNESSEE COAL IRON & RAILROAD CO.

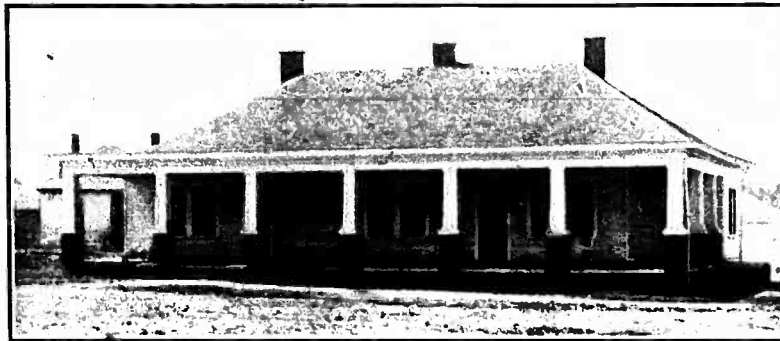


B. SPLENDID NEW CONCRETE SCHOOL BUILDING OPERATED BY THE TENNESSEE COAL, IRON & RAILROAD CO., FAIRFIELD.



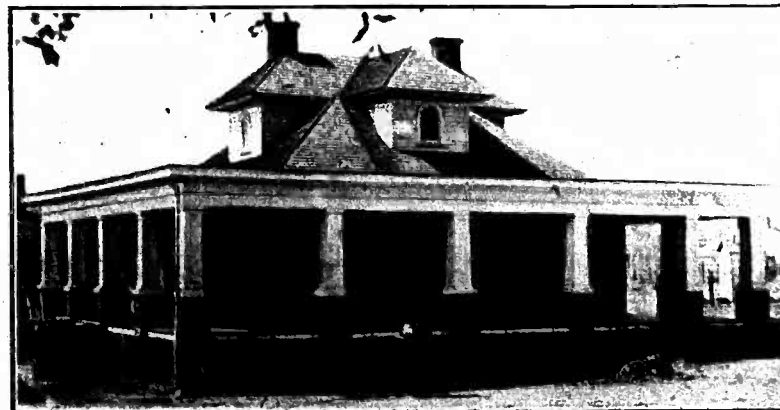
A. SCHOOL AT SHAWMUT.

This is one of a large number of typical cotton-mill schools.



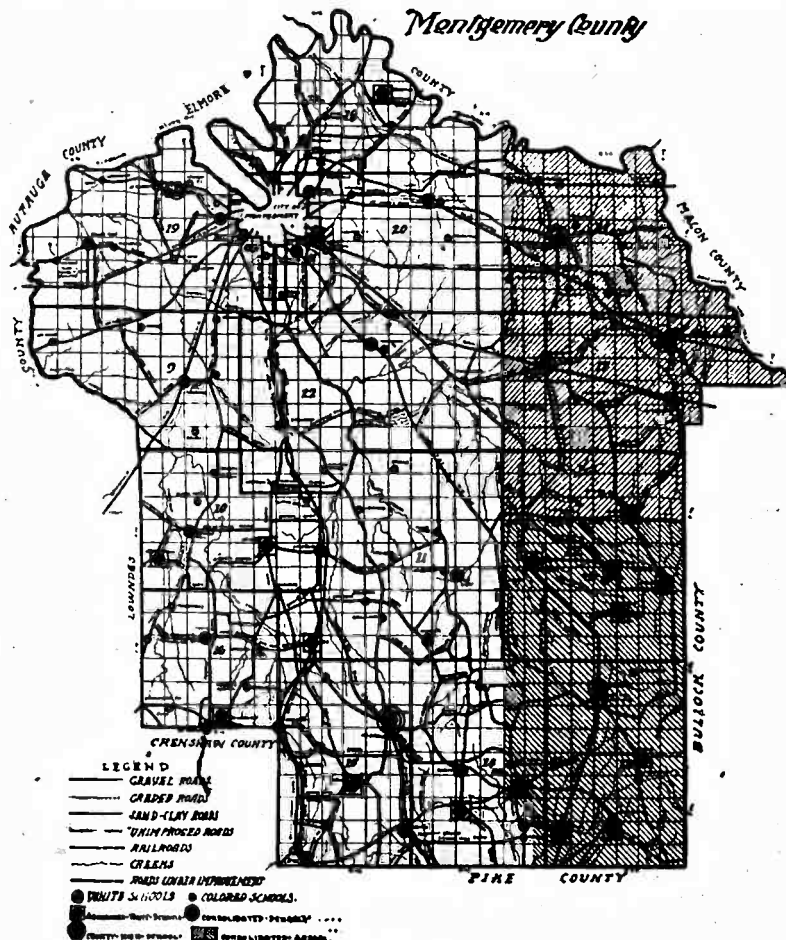
B. TEACHERS' HOME AT SHAWMUT.

The teachers pay \$14.50 per month for board and lodging.



C. PRINCIPAL'S HOME AT SHAWMUT.

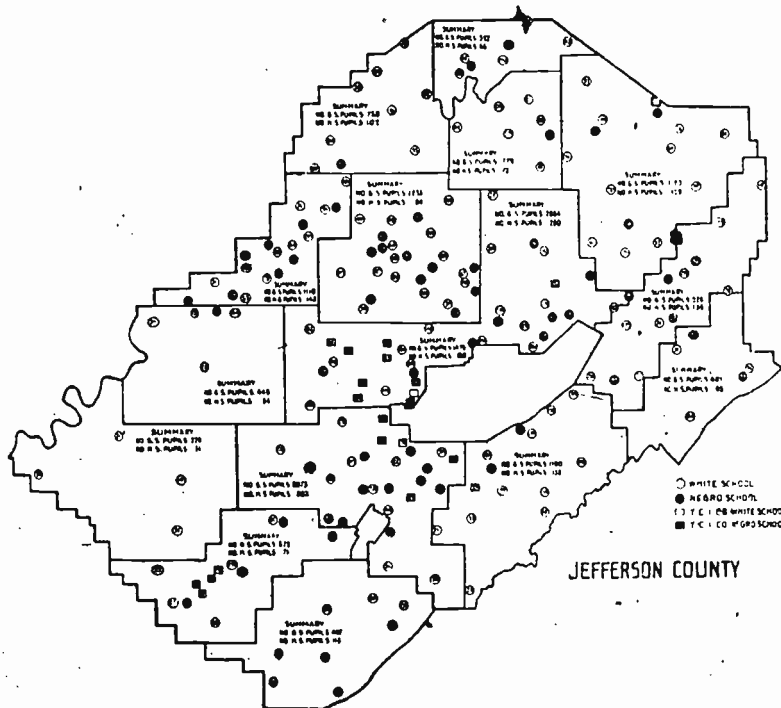
dren of the eastern third of Montgomery County. A county high school is likewise under construction at Ramer in the southern part of the county. This will provide general high-school facilities for all the rural children of the county. When the plan of reorganization is fully realized—and this may take many years—10 or 11



modern schools will furnish the white population with as complete a system of elementary and secondary schools as can be found anywhere in the country.

The new schools planned for an agricultural population.—The new schools are planned for agricultural people. They are landed schools. Pike Road school is erected on 80 acres of rich farm land. Pine Level has fully 60 acres, and Ramer 53. The schools will soon be

supplied with permanent homes for the teachers, so that they may live in the community they serve 12 months in the year, to devote part of their time to ordinary school activities, and the rest to drawing home and school closer together. Agriculture of the practical kind and the important phases of home economics and other industrial activities will have great place in the work of the day in these schools, although assuredly not to the exclusion of the literary or cultural schools. The purpose is to train for Montgomery County a capable agricultural people, ready and eager to live wholesome,



MAP 0.

happy, and remunerative lives on Montgomery County's rich agricultural lands. This will be the county's greatest financial investment.

II. JEFFERSON COUNTY.

Jefferson is the richest and most densely populated county in the State. Its resources are industrial, mining, commercial, and agricultural. Rich deposits of coal, iron, and limestone make possible the manufacture of pig iron, steel, and numerous by-products. The county is underlaid with an almost limitless supply of soft coal of good quality. Birmingham, the largest city in the State, is important as a trade and railroad center. Field crops, hogs, and cattle

raised in 1918 are valued at over \$6,000,000. Surely a county so favored in natural wealth may be expected to be generous in providing for the education of its children.

The total population of the county in 1910 was 226,476, of which 51.6 per cent were native white of native parentage, and 40.5 per cent negro. The foreign-born population was very small. Doubtless it is somewhat larger at present. It is, however, still true that the problem of educating foreigners is relatively slight. The schools are concerned largely with native whites and negroes. The school census for the county in 1918 was 32,418, of which 1,062, or 3.2 per cent, were illiterate. This represents a substantial decrease since 1910.

School attendance.—The enrollment in the county schools for 1918 was about 78 per cent of the census, a very fair record. The percentage of attendance to enrollment, however, was but 58 per cent. This means an average daily absence of about 10,500 children who are enrolled. Members of the committee kept a record, in a large number of schools, of school membership, and number present on the day visits were made. A few of these data are shown in the table below. The visits made by the committee were made in April. There is no real reason why the attendance on the whole should not remain at a normal rate until the close of the term, even though the 80 days of compulsory attendance had expired at the time the schools were visited. Voluntary attendance is a measure of the attenuating or holding power of the school, and of the appreciation on the part of the parents of the need of education and the effectiveness of their school system. Doubtless the extension of the compulsory period to include the full term of school will remedy the matter in part. Corrective measures will, however, be incomplete until the schools are better organized and the work sufficiently practical to appeal to the children's desire for education and the community's ambition for improvement in conditions of living.

Attendance on day of visit, Jefferson County, Ala.

[Per cent present, 62.06.]

Enrollment:	Present.		Present.		Present.
58	47	37	22	40	24
18	4	248	173	59	23
100	100	64	30	40	28
56	42	61	29	20	17
50	36	59	27	32	30
21	16	18	11	32	16
11	7	24	22	42	24
83	32	60	33	23	13
80	60	30	20		
18	2	62	27	1,790	1,111
175	155	20	8		
44	24	30	9		

School buildings.—Jefferson County has not yet achieved definite progress in the matter of furnishing adequate and suitable housing facilities for the school children. No district tax is levied in the county. The entire support comes from State funds and county tax. If provision for building other than the county special tax fund were made and the State and county funds could all be used for maintaining schools, the income would probably be sufficient. However, the income from these two funds is entirely inadequate for both purposes. About 40 of the 135 white school buildings were visited. Of these fully 50 per cent are characterized in the observer's notes as "poor" or "very poor."

The majority of the school buildings in use were built on the old plan of community subscription. They are in every way unfitted for school purposes under modern conditions, and many are in a state bordering on decay. Tottering old buildings, propped on all sides to keep them from falling to pieces or blowing over, buildings sagging in the center due to lack of foundation and long use, are by no means rare. Floors old, worn, uneven, with boards missing and large cracks; door knobs missing with old pieces of wire or a nail through the handle; porches and wooden steps at the entrance in such bad repair as to be unsafe; walls unpainted and smoky; blackboards in poor condition with no frame or chalk rail; and other similar conditions are by no means uncommon in this, the richest county in the State. According to the report of the county superintendent of schools for the year beginning October, 1917, and ending October, 1918, the value of school buildings and sites was \$381,102. The school population in July of the same year was 32,468, making the per capita valuation of school property, based on school population, \$11.72. Bulletin No. 55, issued by the State department of education in 1916, gives the per capita valuation of buildings for the State as \$18.38.

School housekeeping.—Janitor service is furnished for all buildings. The amount spent for this purpose in 1917-18 was \$14,157.85. It might be expected that the school housekeeping would comply with requirements of reasonable cleanliness. The observation of the committee failed to verify such an expectation. If this carelessness in housekeeping were confined to the old, unpainted, weather-beaten buildings, it would not be so surprising. A few of the oldest of the buildings, those in which the teachers showed some interest and pride in their surroundings, were relatively clean; while the new buildings were shamefully dirty. The window glass was smeared and dingy. The boards and chalk rails apparently had not seen soap and water since school opened. Floors were littered with dirt and

papers. Sweepings were left under stoves and in corners. Unused and broken pieces of desks, curtain poles, old rags, and similar waste material collected dust in corners. The tops of bookcases were catchalls for dust and unused materials. In one case the principal's office, furnished expensively in new mahogany, with a conference table, chairs, teacher's desk, built-in bookcases, and several hundred books, which might easily be attractive and beautiful if given the most ordinary care, had degenerated into a shabby, dusty, unpleasant, and in every way uninviting place. Instances like the above are by no means isolated or unusual. Indeed, they follow the rule. Only occasionally, and with surprise, did the visitors find reasonably clean buildings.

The majority of the schools are heated by stoves. With one or two exceptions they were found to be rusty, with pipes often old and tumbling down; if unused they were piled in a corner or on the platform, collecting dust. Auditoriums, especially those supplied with stages not used for school classes, are storing places for old trash of every description. These conditions were found in schools teaching hygiene through health crusades, toothbrush drills, and the like. Some teachers seem entirely unaware of the conditions. Others adopt a laissez-faire attitude toward the school and the equipment and are prolific in excuses, such as the janitor is poor, or the school has no proper equipment. The same carelessness was noted in the upkeep of toilets, yet no one assumes responsibility for the bad conditions found. Some teachers explain that the difficulty is due to the homes from which the children come. So far from excusing conditions, this, if true, emphasizes the necessity of stressing these matters with even greater care. Where are the children to get ideals or acquire habits of cleanliness if not in the schools?

The teachers.—Jefferson County has a 9-month school term. The salaries of teachers are shown in Table 18. Owing to the difficulty of getting good boarding places a large number of the teachers live in the near-by cities of Birmingham and Bessemer. Some of the mining companies, notably the Tennessee Coal & Iron Co., furnish cottages for the teachers. The county itself provides only one. The county superintendent and board of education have established a minimum requirement as follows: (1) Normal school graduation or its equivalent in college work, or (2) a high-school diploma with 16 months' successful experience. They have inaugurated also a system of classifying teachers, scaling salaries according to educational qualifications and success in teaching.

TABLE 18.—Schedule of salaries of teachers.

Experience.	A Grade.	B Grade.	C Grade.
Inexperienced.....	\$60.00	\$55.00	\$50.00
1 year's experience.....	62.50	57.50	52.50
2 years' experience.....	65.00	60.00	55.00
3 years' experience.....	67.50	62.50	
4 years' experience.....	70.00	65.00	
5 years' experience.....	72.50	67.50	
6 years' experience.....	75.00	70.00	
7 years' experience.....	77.50		
8 years' experience.....	80.00		

Salaries:	Number receiving.
\$50 to \$60.....	127
\$60 to \$65.....	45
\$65 to \$70.....	87
\$70 to \$75.....	20
\$75 to \$80.....	40
\$80 and over.....	109
Total.....	428

The classifying is done by the supervisory force on the basis of the following points in preparation and teaching success: (1) Preparation, 21 points; (2) teaching ability, 27 points; (3) business, 15 points; (4) personality, 19 points; (5) loyalty, 10 points; (6) community interests, 8 points. Total, 100 points. The superintendent makes every effort to retain successful teachers in the system. The salary scale acts as one incentive. In addition, the successful teachers are moved to the more desirable schools near Birmingham and Bessemer as a reward for good work. The scheme is a commendable one. Its complete success depends on the judgment and the ability of the supervising staff to carry out the plan intelligently. The committee believes the idea worth special commendation, particularly as it encourages longer tenure and rewards actual teaching ability.

The staff of teachers in Jefferson County, as might be expected owing to the longer term and better salaries, is of higher grade than in other counties judged on the basis of training and experience. (See Table 19.) The length of service in the county is also longer, marking a distinct advance in the teaching staff. The principals are not, in the opinion of the committee, always fitted by training, experience, ability, and personality to fill positions of such importance. As compared with the other teachers they are not always the best in the group. The idea of promotion already established as a reward for successful teaching might well be extended to the selection of principals. This would give an opportunity for good teachers to aspire to a principalship regardless of sex, and would encourage continued training and intelligent work. Principals should have free time for supervision; most of them teach several classes and some have no vacant periods at all.

TABLE 19.—Education beyond the elementary grades of teachers in Jefferson County.

Years of education beyond elementary grades.	Number of teachers having—	Per cent.
1 year.....	3	0.66
2 years.....	15	5.00
3 years.....	22	7.33
4 years.....	90	30.00
5 years.....	63	21.00
6 years.....	93	31.00
7 years.....	2	.66
8 years.....	13	4.33
Total teachers reporting.....	300	100.00

Supervision of the schools.—Jefferson County has inaugurated a complete plan for supervision. The staff is composed of the county superintendent, two assistant superintendents, four special subject supervisors, and 10 supervising principals. (See map 7.) The superintendent and one assistant superintendent and the four special subject supervisors have as their field the county as a whole. The other assistant superintendent is in charge of the group of schools which are financed in part by the Tennessee Coal, Iron & Railroad Co. The present plan has been in operation for about two years. The salary of the county superintendent is \$5,000; of the assistant superintendent in the employ of the county, \$2,100, and that of each of the special subject supervisors and the supervising principals, \$1,320, with an annual traveling allowance of \$300.

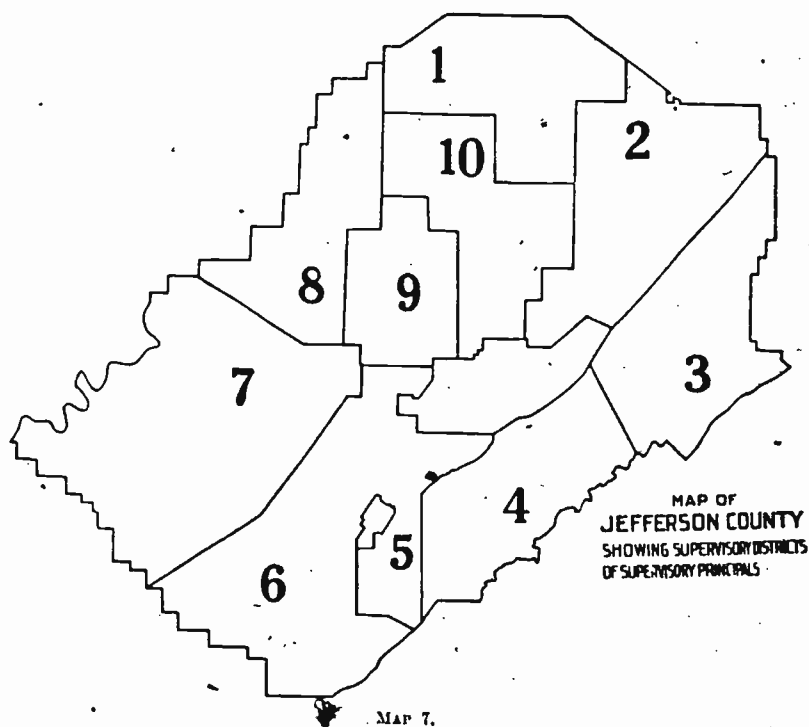
The plan of supervision is a good one, and many beneficial results were observed. Compared to counties with less supervision, the discipline is better, seating arrangements are improved, repairs receive more and better attention, and the most necessary equipment is more apt to be supplied promptly. Attendance is no doubt improved by the careful attention which the supervisors are able to give to the enforcement of the compulsory attendance law. Supervision also results in better grading, more children complete the seventh grade, and the percentage of promotions is higher because of the frequent visits and assistance rendered to teachers by members of the supervisory staff. The supervising principals reach every school and each teacher about once in two weeks, the county superintendent and assistant supervisors and special subject supervisors less often, but from one to three times in a year at least. In this way the teachers become accustomed to regular inspection at reasonably short intervals. Such supervision gives a motive for system and regularity in the conduct of the school. It is suggestive to the untrained teachers, and helps those with professional training to retain interest and pride in professional ideals and methods.

From the point of view of modern ideas of professional supervision the results are disappointing. The work of the special subject supervisors (discussed more fully under another heading) and of the supervising principals is not of a high quality. In the opinion of the committee the supervising principals are hampered by too much stress on unimportant details, mechanical equipment, supplies, and the like. There is a noticeable lack of professional attitude, unity of purpose, and definite aims on the part of teachers, a condition quite inexcusable in a county with a large number of supervisors. The influence of strong, intelligent leadership, ability to organize and to instill loyalty and enthusiasm among the teaching staff is not apparent. This is not due to absence of conscientious effort on the part of the supervisors. On the whole, they are an intelligent, hard-working, and earnest body. It is due, in the opinion of the committee, to lack of professional training for supervisory work; of a real conception of the purposes of supervision; of ideals for a good school system and familiarity with good modern schools. Successful teaching experience does not necessarily constitute sufficient qualification for supervision. Ideals, breadth of view, ability to lead and organize are of paramount importance. The committee believes it is a mistake to select all the supervising staff from within the county. Some of them should come from outside the county or even outside the State. Too much inbreeding of educational ideas is not conducive to success. The salaries are too low to be commensurate with the duties assigned or the results which should be expected from a well-ordered plan of supervision.

Special and vocational subjects.—Jefferson County is the only one visited by the committee in which manual training, home economics, music, and art are included in the regular course of study and are in charge of special supervisors. The supervisor of manual training teaches in the county high school a large part of his time. The other three subjects are in the hands of persons who devote all their time to supervision. In the case of home economics and art, the teachers are organized into groups and paid by the county board for attendance at Saturday teachers' meetings, where special instruction is given by the supervisor. The music supervisor attempts to accomplish her work wholly through visits to schools, outlines to teachers, and work at the annual institute held before school begins. The special supervision for the subjects named has been in vogue in the county for a number of years, and in at least two cases the present supervisors have been at work in the county more than five years.

There is every reason to expect the work in these subjects to show significant results. Such expectations were, however, almost entirely unfulfilled, so far as the committee's observation goes. Poor results are due in part to the following conditions: (1) There is little evidence

of careful organization of groups of teachers, or ability on the part of the supervisor to accomplish results through the teachers themselves rather than by working with the children. Except in occasional cases, and for special and definite purposes, the rural supervisor can not obtain results if he depends entirely on his ability to reach the children directly. This is in most cases a physical impossibility. The results of supervision are successful only in so far as the teachers are led to adopt an enthusiastic attitude toward teaching the special subject and are trained and definitely directed in



methods of carrying out the plans of the supervisor. In paying teachers for attendance at group meetings the board is showing the disposition to furnish ample opportunity for accomplishment, but the supervisors have apparently failed to fulfill the possibilities. (2) There is very little correlation between the academic and vocational subjects, and practically no relation between the vocational subjects and the real and practical employment of the knowledge gained through their study. To illustrate, the home economics teaching should result first in clean housekeeping. Yet the school buildings notable for lack of cleanliness were often those in which there were special rooms fitted and well equipped for the teaching of this sub-

ject. Even the rooms themselves used for cooking demonstrations and teaching were often far from clean or orderly. Schools in which manual training is taught were often those most needing a few nails or screws or other simple repairs. It is difficult to see that teaching these subjects is of great value unless it affects the habits of the children and the upkeep of their immediate surroundings.

The objects made in manual training shops most commonly observed by the committee, even in schools in which some high school subjects were taught, were coat hangers, paper files, and towel racks. One reason for the introduction of vocational subjects into the school curriculum is their practical value to boys and girls in the everyday activities of life. Jefferson is an industrial and agricultural county, and should be an ideal situation for the teaching of vocational subjects. It is apparent from the appearance of the children and the community that there is special need of vocational training. Yet little of the work seen was such as would vitally touch the lives and habits of the children.

The results of art supervision were more apparent than that of the other subjects. In the primary grades paper cutting, colored work in flowers, birds, and the like, were often found associated with the work of the school. Similar correlations were not, however, apparent in the upper grades. Some very good work was seen, and in some cases it was well arranged in the room for display or for the purpose of beautifying the room. It is, however, very disappointing that systematic and continuous supervision of art, extending over a period of years, should not result in higher appreciation of such simple art principles as order and cleanliness and that the educational influence of a few good pictures or even clean walls should be so entirely overlooked.

The committee found no evidence of supervision in the teaching of music. Some regular music lessons were heard, and in a number of instances the children sang during the visit of the observer. The results were almost uniformly poor. The music teaching was not even distinguished by the selection of songs suitable for the different age groups. Training for tone production and musical appreciation was apparently entirely lacking.

School organization.—The schools are organized on the regular plan prevalent in the State of seven elementary and four high school grades. There are two 4-year county high schools, one at Boyles and one at Alliance; and 125 of the county pupils are transported to high schools in Bessemer and Birmingham. Unfortunately, a number of smaller schools are attempting to teach two and three years of secondary school work. This is in most cases of little value, since the teachers have no special preparation for high-school work, the equipment is inadequate, and the teachers in the upper

grades are required to give too much time to high-school subjects at the expense of the lower grade rooms. However, the department of education has adopted a scheme for four-year high schools throughout the county. This plan, when in operation, will place a high school within easy access of all the children in the county. The scheme is to be financed chiefly through organizing the districts outlined in the map as special tax districts for high-school purposes. It is hoped that the 3-mill levy in these tax districts will furnish special funds for buildings and maintenance.

Of the 133 white schools, 29 are one-teacher schools. Some of these will be abandoned the coming school year. There are 24 two-teacher and 22 three-teacher schools. The other buildings have from four to nine teachers. Consolidation, therefore, is not a serious or unsolved problem. Complete consolidation will eventually be accomplished in so far as possible by carrying out the plans of the board. The roads are good, and transportation is satisfactory. At present 564 children are being transported to 14 schools at an expenditure of approximately \$14,500.

In addition to elementary and high day schools, 52 night schools were in operation during the year 1917-18. Fewer are in operation during the present year, largely owing to the facts that soldiers who made up a large part of the attendance are no longer there and that the influenza epidemic made attendance irregular and even impossible in many cases. However, the night-school idea is a very commendable one, and the board should be congratulated on the establishment of this, the one organized plan for night school under county administration in the State.

Recommendations.—(1) The present old and insanitary buildings should be replaced with modern ones. Schools can not be carried on successfully, nor can capable teachers be obtained, unless reasonable facilities in the way of buildings and equipment are supplied. Because of the necessity of so many buildings, the committee believes it advisable to plan buildings of a relatively inexpensive character, yet at the same time, modern and attractive. It would also seem good policy to build only for supplying present demands and on the unit plan. In a few cases, the buildings observed were larger than immediate needs seemed to justify.

(2) The supervising staff should be made up of persons of ability with at least 4 years of higher education and special training in modern ideas and methods of supervision and successful supervising experience. They should be selected without regard to county or State boundaries. If more money can not be appropriated for this purpose the committee believes better results would be obtained with half as many supervisors at twice the present salary. As soon as more money is available additional supervisors can be added.

Probably a salary of at least \$2,500 or \$3,000 per annum will be necessary to secure qualified persons. At least one should be a specialist in primary work.

(3) Teachers, and especially principals, should be better paid, and higher qualifications should be demanded. Any county in the immediate vicinity of a large city must pay good salaries or the city will take annually the best members of its teaching force. It is particularly desirable that principals capable of administration and supervision be obtained. This will necessitate higher salaries and demand higher qualifications. It will also necessitate at least half a school day free for administration and supervision. Good principals are particularly necessary in a rural system, where close supervision is otherwise impossible.

(4) A course of study better adapted to conditions in the county should be installed. The committee recommends here, as elsewhere, the 6-3-3 plan. Jefferson County is an ideal situation for the adoption of such a plan with industrial and agricultural courses of study. Junior high schools should provide agricultural courses, and should begin vocational guidance, the study of citizenship, industrial arts, and home economics. The courses should be vocational in the sense of offering industrial, home economics, and agricultural training, and cultural in the sense of preparing for college entrance those students who desire to take professional courses.

Tennessee Coal, Iron & Railroad Co. Schools.—The most interesting educational experiment in the State, observed by the committee, is conducted by the Tennessee Coal, Iron & Railroad Co. in connection with its social welfare department. There are 21 of these known as the T. C. I. Schools in Jefferson County. The company furnishes buildings, employs a superintendent and special teachers, and supplements the salaries of the regular teachers. This work is done in complete cooperation with the county. The superintendent is the assistant county superintendent, but is paid entirely by the company.

Special emphasis is placed on the work in physical education carried on in the schools by the regular teachers supervised by a specialist in the subject. Cooking and sewing are also stressed and are taught in the welfare cottages located near the schoolhouses, with a special director in charge. These cottages are duplicates of those built by the company for its employees and are furnished simply, but in good taste, with such furnishings as the workmen can afford. They serve as demonstration cottages for the community as well as classrooms for the children. Schoolhouses are built by the company and fitted into the scheme of landscape artistry adopted. Sites are carefully selected. The architecture harmonizes with the village scheme, to which the schoolhouse and grounds often add the finishing touch.

Buildings are particularly attractive and conform to the best modern ideas of school architecture, both outside and inside. The grounds are laid out with trees, shrubbery, school gardens, inclosed tennis and basket ball courts, and other equipment for recreation. The majority of the buildings visited have auditoriums, cloakrooms, supply closets, and other school conveniences. There are adjustable desks, supplementary reading material, and good working equipment in all schools.

The school housekeeping and general upkeep are worthy of special notice and may well serve as a model for other schools in and out of the county. Janitors are furnished in all cases, and the work is supervised by the teachers. Floors are clean and well kept. Blackboards and windows are washed with soap and water regularly. The walls are decorated in good colors and the interior of the rooms presents a pleasant appearance.

The salaries furnished by the county for teachers are supplemented sufficiently by the company to enable the superintendent to secure professionally trained and experienced persons. Social work is required by the company and special stress is placed on personality and fitness for this additional service. The classroom work observed is of splendid quality. The teaching staff shows good organization, enthusiasm, loyalty, and a high degree of professional spirit. As an example of this, the May Day program of the colored schools held at Westfield, May 3, may be cited. The program consisted of a pageant, introducing setting up drills, folk dances, and the like. Children marched and drilled with soldier-like perfection. They showed splendid training, all of which was given by the regular teachers—none of whom had had previous experience or training in this kind of work—under the direction of the supervisor of physical education. The interest of the community was shown by an attendance of probably 2,000. The program was carried out without a hitch, and order on the grounds was perfect throughout the day.

This is one example of the organization and supervision which prevails throughout the system. As a whole it is an object lesson in efficiency which may well be studied by other county and city systems in the State. It shows conclusively and on the ground what can be done by the expenditure of reasonable funds, business management, and professional service. Conditions are not different in any essentials from those of the surrounding territory. What can be accomplished here can be accomplished elsewhere in the State with similar management and expenditure.

If a private corporation can get value received from the money spent on these schools in the added efficiency and happiness of its employees, will not the county and State benefit at least in the same proportion from similar methods in school improvement? These

schools demonstrate conclusively that the ideals advocated in this report are possible of achievement in Alabama; that education is a good business investment; that schools outside of cities can be as good as those within them; that people appreciate good schools, and good buildings; and that teachers and children under trained leadership are capable of doing good work and are happy in doing it.

III. BULLOCK COUNTY.

Bullock County is selected for intensive study as typical of the so-called black-belt portion of the State. It is located near the eastern boundary, south of the central portion. The surface is rolling and uneven generally, but level in the western or "prairie" section. Here stock raising is carried on quite extensively, the land lending itself to the growth of grasses and some grains. Some stock, chiefly hogs, are raised in the remaining portions, but cotton, corn, and peanuts are by far the most abundant crops.

Population.—The population is practically all native; there are but 15 foreign-born persons between the ages of 10 and 20 according to the 1910 census. The county has a large Negro population. Of a total of 30,196, but 5,500 are white. The rate of illiteracy is very high. Of the total males of voting age in 1910, 38 per cent were illiterate. Of the population between 10 and 20, that is, entirely within the legal school age and including the compulsory attendance age, 7,886 or 23 per cent approximately are illiterate. It is especially unfortunate that not alone adults, but about 2,000 children actually of school age are not being reached by the public schools even in the limited degree necessary to overcome absolute illiteracy.

Resources.—Two branches of the Central of Georgia, and the Birmingham and Southeastern Railways traverse the county. These roads give ample egress for the productions of the county, which are almost exclusively farm crops. That the county has a rich soil and possibilities of great prosperity, is indicated by the fact that the farm crops and beef and pork produced in 1918, are valued at \$6,969,000. In addition to the actual production as given above, there are in the county at present 28,000 cattle, 40,000 hogs, 105 registered bulls, 475 registered cows. The amount of bank deposits in the county, July 1, 1918, was \$1,083,677.09, while those of the same date in 1914 were but \$536,075.50. It is interesting to note in this connection that the total tax valuation of the county for 1918 was \$5,200,000, and was exceeded by the annual production to the extent of approximately \$1,700,000. This is additional evidence of conditions in the State referred to in another chapter concerning the necessity of raising the tax valuation for assessment purposes, and indicates a very wide divergence between the present assessed valuation and the true valuation of county property.

Farming.—Bullock County is among those in the State in which cotton was cultivated to the exclusion of other crops until 1914. While diversified farming and stock raising are improving conditions materially, old methods of farming are still in vogue among a large part of the population. Very little modern farm machinery is in use. The lack of good farm buildings, machine sheds, silos, and other similar characteristics of successful farm communities is very marked. The schools have so far exerted practically no influence in the introduction of intelligent and scientific farm methods. Land which will produce such prolific crops as have been indicated above with the poor methods of farming now in vogue promises to be exceedingly rich if scientific methods were followed.

School conditions.—Bullock is one of the eight counties in the State which has no county tax for school purposes. With the exception of Union Springs, the only town of over 2,000 inhabitants, the people depend entirely on State funds, dog and poll taxes to educate their children. Like certain other counties referred to in a previous chapter it has not yet assimilated the true idea of the meaning of public education. A number of white schools supplement the term afforded by the county from one to two months, and, in a few cases, supplement the teachers' salaries. About four-fifths of the colored schools are supplemented both in length of term and teachers' salaries by subscriptions from the community.

The State apportioned to the county for 1918 \$2.86 per capita of school population, white and colored. The average per capita expenditure for teachers' salaries in white schools varies from \$11.36 to \$78 per annum, averaging \$36.96 for the county as a whole. The term is six months in white schools and three months in colored. Of the total amount received from the sources mentioned above, \$28,060 is spent in teachers' salaries; \$2,384 for transportation; \$2,900 for administrative expenses, including salaries of the county superintendent and county home demonstration agent and other office expenses, a total of approximately \$32,000. For a county which can produce crops valued at \$6,969,000 a year, this expenditure is very meager, indeed. Even if the county alone, without State aid, paid this amount, it would mean an expenditure of but four-tenths of 1 per cent of its annual income for the education of its children.

Consolidation of schools.—Since the law providing for the county unit of administration went into effect, or for about one and a half years, the county board of education and the county superintendent of schools have promulgated the consolidation idea among the people of the county and have promoted centralization of school facilities, or formed plans for doing so, about as rapidly as roads and other contributing conditions permit. The consolidation so far effected has

been brought about by closing a few small schools and transporting the children to larger schools already in existence. The county board has in contemplation a plan to redistrict the county with a view to effecting gradually a reasonably complete plan for the consolidation of elementary schools. At present 101 children are transported at an expense of \$2,384.50 to ten schools. The per capita expense of transportation averages \$23.60, ranging from \$11.17 to \$47.33.

High-school facilities.—Bullock has no county high school. The district high school at Union Springs is the only accredited public four-year high school in the county. Several of the larger rural schools, such as Midway, Perote, and Inverness, include the upper grades, the eighth, ninth, and tenth. Secondary school subjects are taught in these schools by the principal assisted to some extent by teachers regularly employed in the elementary grades. Here as elsewhere this practice should be discontinued. It results in an injustice not alone to the pupils of the elementary grades, who are deprived of the necessary amount of attention on the part of their own teachers, but to high-school pupils also. A high school worthy of the name requires specially trained teachers and equipment in the way of science laboratories and reference libraries.

So far as real secondary education is concerned, Bullock County furnishes no facilities for its rural children. In connection with the redistricting plan, referred to in a preceding paragraph, the county board should keep in mind as its ultimate goal a system organized on the 6-3-3 plan, explained fully in another chapter. One-teacher schools should teach only the first six grades. Junior high schools, including the seventh, eighth, and ninth grades, should be located in strategic places throughout the county, drawing on a larger territory than can one and two teacher schools. At least four teachers are necessary for schools with junior high-school courses. Of these, Bullock County needs several. The full time of three or more teachers and proper library and laboratory facilities will be necessary for an efficient senior high school. One or two will probably suffice for the county for some years at least. Pupils who are prepared to enter senior high schools are old enough to travel long distances. Transportation should be furnished by the county.

School buildings.—The school buildings of the county, considered as a whole, are old, in poor condition, insanitary, inappropriate, inconvenient, and in every way unfitted for the purposes they serve. They have been built by the communities in which they are located with funds subscribed by the patrons. In a few cases there are State buildings built by the community with the help of State funds. These are more modern than the others and built with some idea of appropriateness and sanitation. They are frequently unpainted and

almost entirely unequipped. A few old two-story buildings, built originally and sometimes still used for lodge purposes, are fitted up for schools.

There are few cloakrooms. Children hang their hats and coats on the walls or throw them over unused desks or their own desks. Blackboards are entirely insufficient in amount and poor in quality. No slate boards were seen; hyloplate, beaver board, and painted boards are the most common. Double desks prevail throughout the county and in most cases they are not fitted in size for the children who use them. Many schools have not proper provision for supplying water, but use the neighbor's well, or a nearby spring, often impure. The water within the rooms is sometimes kept in proper sanitary coolers, but frequently no such provision is made and the open pail and the common dipper still prevails. In the rural schools, playground equipment is entirely unknown. It is very common to find the yard in bad condition, littered with papers and brush, the ground beneath the building used as a storehouse for all manner of useless articles, and the building itself, especially as to walls and floors, decidedly unclean. Such a condition of affairs can not but lead to the utter neglect of a very important part of the education of children, including the cultivation of habits of physical cleanliness in their person and in their surroundings. The situation in regard to toilets is a disgraceful menace to the health and morals of the children. Some schools have no toilets. Many have but one, in such bad repair as scarcely to afford decent shelter; boards missing, doors hanging, and similar serious oversights prevail. Many rural schools make no effort whatever to supply and maintain toilets for the boys, considering it either unnecessary or impossible. The few schools which are supplied with two toilets, do not provide means for caring for and cleaning them. This is apparently no one's responsibility. Conditions are, therefore, exceedingly bad in many cases. No sanitary toilets were seen outside of the school in Union Springs, in which their care is far from satisfactory.

Classroom instruction.—The teaching observed in the various classrooms exemplified the poor work described in a preceding chapter. There is a very marked lack of professional spirit. There is no *esprit de corps* among the teachers of the county, no unity of procedure. Each school, and in many cases each teacher, practically goes his own way, free to have as good or as poor a school as he sees fit, with little regard to conditions in other rooms or other schools of the county. There are a few trained teachers. Most of them, however, lack professional training or a sufficient amount of academic education to make good work possible. So long as the county pays

small salaries and maintains a term of but six months, it can not be expected that professionally trained people will aspire to teaching positions in it. At present the majority of women teachers get \$60 a month. The principals, all of whom are men, receive from \$100 to \$125. The teaching is largely repetition of the material found in the book and the teachers can best be characterized as "keeping school" and "hearing lessons."

School attendance.—School attendance in the county is very poor. The following table, made from data collected from schools visited by members of the committee, is one indication of this. All that was said concerning school attendance in the State in a preceding chapter is exemplified at its worst in Bullock County. Lack of school interest, old and poorly equipped school buildings, short terms, and underpaid teachers always conduce to carelessness and irregularity in attendance. Children can not be expected to have more respect for the schools or value education more highly than their elders.

Attendance on day of visit, Bullock County, Ala.

[Per cent present, 79.15.]

Enrollment:	Present.	Enrollment—Continued. Present.	Enrollment—Continued. Present.
24	12	88	25
19	15	82	24
17	10	40	35
20	10	27	23
100	100	38	33
14	18	8	5
21	11	31	27
			14
			29
			27
			—
			499
			305

Recommendations.—(1) The money provided for school purposes must be substantially increased. Both county and district taxation will be necessary to maintain good schools. New buildings should replace those now in use throughout the county except in those cases in which State buildings are now provided. This will require some bonded indebtedness if satisfactorily accomplished.

(2) The term should be lengthened in both white and colored schools. More and better teachers are essential and higher salaries must be paid to secure them.

(3) Professional supervision is essential to good results in school work. A primary supervisor should be engaged immediately. The home demonstration agent should be primarily a county supervisor working under the direction of the county superintendent. She should assist in the supervision of the upper grades and correlate the school studies with the club work. The clubs may then be organized and directed by the teachers under the supervision of the home demonstration agent.

(4) Additional and closer supervision should be supplied through principals who are capable, experienced, and professionally trained. Until complete consolidation is accomplished, certain districts should be formed in the county in which from two to five schools together employ one person who acts as supervising principal for the group. The principal should have plenty of free time for supervising and an expense allowance for transportation among schools.

(5) A director of school health (see plan outlined in another chapter of this report) is particularly essential in this county. Sanitary conditions of the school sites and buildings as well as health conditions among children need immediate attention.

(6) Adequate arrangements must be made for the enforcement of the compulsory attendance law. The large number of illiterates and poor school attendance show this to be necessary.

IV. COLBERT COUNTY.

Two counties, Colbert and Madison, are selected for discussion as typical of that portion of the State known as the Tennessee Valley. The population of Colbert County is chiefly white, with a total of 24,802, of whom 15,352, or 61.9 per cent, are white, and 9,444, or 38.1 per cent, are colored. The percentage of illiteracy among those 10 years of age and over is 20.7 per cent for both races. Ten per cent of this is among the whites, and 37.5 per cent among the negroes. The total number of illiterate persons between the ages of 10 and 20 years, or of school age, is 996.

Physical resources.—Colbert County has relatively a low valuation with great stretches of unimproved and practically waste land. Tusculumbia, the county seat, is an industrial center in which are located nitrate plants now under Government management. Sheffield, a few miles distant, has similar conditions. The remainder of the county is entirely agricultural. The northern part is relatively level, and given over to the cultivation of corn and cotton. The southern part is hilly, and contains much unimproved and waste land.

The total money value of farm crops, cattle and hogs, produced in 1918, was \$4,304,000; that of the industrial centers surrounding Tusculumbia and Sheffield is not available. Cotton is by far the most important farm crop, the value of that produced in 1917 was over \$2,000,000. Cattle and hog raising is increasing in importance, although the value of thoroughbred stock raising as a paying business is not yet appreciated in the county. The lands, however, are fitted to produce abundant crops, corn, small grains, and grasses. The assessed valuation of property for tax purposes is \$9,200,000.

School conditions.—The schools are supported by State funds, county, and poll taxes. A statement of receipts and expenditures for 1918 follows:

RECEIPTS.

County tax	\$27,800.00
Poll tax	2,914.50
State	32,712.48
Total	62,526.98

DISBURSEMENTS.

For teachers' salaries	\$56,000.00
For libraries	1,880.00
Maps, globes, etc.	534.00
Salaries	3,950.00
Office expenses	250.06
Total	62,614.00

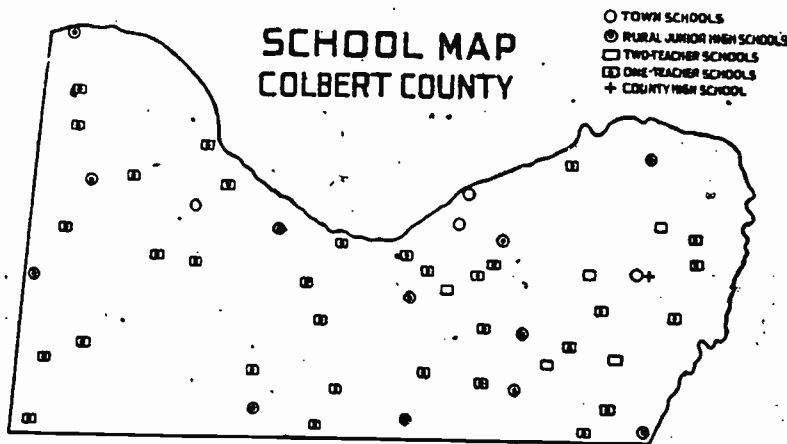
Of the \$62,000 spent in 1918 for school purposes, the county itself furnished through county taxation and poll taxes, \$28,600. This amounts to about seven-tenths of 1 per cent of the income for the same year. The remaining 54 per cent of the total expenditure was received from the State. Colbert is one of those counties which gets from the State for school purposes more than it pays into the State treasury in the form of taxation for all purposes, an amount equal to 54 per cent of the total spent for schools.

From an educational standpoint, the county is almost entirely undeveloped. The buildings are exceedingly poor, and are of the type built years ago by community subscription. Lighting, heating, ventilation, and other sanitary requirements were entirely overlooked when the buildings were erected. There are a few new State buildings with sufficient ground and with proper provision for convenience and sanitation, but these are entirely insufficient in number. At the beginning of the present school year certain minimum requirements were exacted by the county board of education from the local communities. Some idea of the difficulties encountered by the present board and the superintendent may be gained from the fact that of the 42 white school buildings, 35 were required to build new toilets before school opened for the present year, making a total of 70 new toilets placed in the county last fall.

In fact, at the beginning of the present school year, October, 1918, the county board and the county superintendent, who then entered upon the duties of his office, were confronted with a situation similar to that already described in Montgomery County. Buildings were

Money spent for libraries came from the State, the county commissioners, and the community.

altogether bad, teachers untrained and inefficient, salaries low, the term short and divided into two sessions. The schools were entirely unequipped, neither books, globes, maps, nor blackboards other than painted walls having been supplied. There were no desks except those of the homemade variety in the majority of the schools. Drastic measures were needed immediately. The county board had taken an advanced step, made possible by the recently enacted law, and engaged a superintendent from outside the county, of long experience and professional qualifications. They next enacted certain regulations concerning minimum requirements expected of local com-



MAP 8.

munities, teachers, and school officers. Briefly, the most important of these were as follows:

1. Every school must be supplied with a woodshed and sufficient wood, ready cut.
2. Stoves must be bought and stovepipes must be riveted and fastened so that they can not fall.
3. Sufficient and proper light must be provided by rearranging and cutting new windows where necessary.
4. Satisfactory school desks must be provided for all schools.
5. No common drinking cups will be allowed on the school grounds, and some kind of water container with a cover and faucet must be provided.
6. Some arrangement for keeping down dust in the schoolroom must be made.
7. Toilets must be provided for both boys and girls on every school grounds.
8. Sufficient usable blackboards, maps, charts, a globe and reasonable library facilities must be provided.

NOTE.—Any school failing to provide the above within a reasonable time after school opens shall be discontinued until after such is provided.

9. A continuous term of at least 6 months each year will be provided.
10. Classes must be so combined as to reduce the number of recitations per day to not more than 25 for one teacher.

11. All teachers shall dismiss their schools on Thursday afternoon once every six weeks for the purpose of meeting in a county teachers' conference which all teachers shall be required to attend.

These regulations were carried out by the trustees and teachers in all schools observed by the committee. The board placed patent desks in all of the schools not previously equipped with them; 24 feet of blackboard; one good map; a globe, and a small library. This represents a splendid accomplishment for one year, but is, of course, entirely inadequate to the actual needs of the schools. Many of the old school buildings, repaired and equipped with desks, unilateral light, etc., are such as to make additional expenditure of doubtful economy. So long as the county or district is not able to provide the housing facilities adequately by assuming bonded indebtedness, it must build, equip, and maintain schools both from State funds and county tax revenue. These funds are insufficient for maintenance alone. A sacrifice must therefore be made either in the kind of buildings furnished or in the quality of instruction given, as represented by the length of term and teachers' salaries. The county board and superintendent have cast their lot on the side of instruction by paying larger salaries and trying to secure more trained teachers. This is recognized as a necessary though unfortunate choice.

School supervision.—The distinctive advance made by the county educationally is toward professional supervision. The great bulk of time and attention, as well as money, is placed on the improvement of the classroom teaching. While by no means completely accomplished, the committee found greater advance toward professional supervision than in the other counties visited. This is evidenced by the systematic plans for the carrying on of special work and definite accomplishment along particular lines. There is evidence of a proper conception of organized supervision; a corps of teachers working in a unified manner toward definite ends; some professional spirit; loyalty to the system, and unity of educational purpose.

The course of study prescribed for the county is definitely divided into an elementary course of six grades, and a rural high-school course of three grades. The rural high schools are located at strategic points with reference to as many surrounding six-year schools as topography and road conditions permit. (See accompanying map.) Eight sessions of not less than six months each (the minimum term adopted by the county board) are required for completion of the elementary course and four sessions for that of the high school. Home project work, supervised by the county superintendent and his assistant, is given school credit in the last two years of the elementary course and throughout the rural high-school course. At least two years of home project work are required for

the completion of the high-school course. A certain minimum of library reading is also required. Following are the home project courses: Management of hogs; management of cows; management of poultry; growing and canning of vegetables; growing of corn; growing of peanuts; cooking; sewing; making home conveniences; home care of the sick.

Supervision is carried on chiefly in the following ways: First, through teachers' meetings which occur every six weeks in the office of the county superintendent. These the teachers are required to attend. They are furnished in advance with definite subjects for discussion or instruction at these meetings. An opportunity is given the county superintendent to give necessary directions for the carrying out of proposed plans, and for the teachers to ask questions or discuss their needs in regard to them. Second, weekly letters outlining plans for teaching the elementary school subjects, including farm subjects through the home project work, are sent to each teacher. Third, reasonably frequent visits by the county superintendent and his assistant are made to all schools for the purpose of checking up the methods, of following outlines and other instructions, and of assisting the teachers in better methods of work.

A splendid effort is being made to link the school and home and to make the school work practical by teaching farming, especially those phases of it most needed in the county—stock raising, for example. In promulgating this work the superintendent has placed in each school 15 selected books on agriculture, and an annual subscription to "The Progressive Farmer." All schools visited were equipped with a rag-doll seed tester, and were making germination seed tests of corn. Emphasis is being placed on the necessity of thoroughbred stock raising for the county, and in this connection attractive agricultural posters are on the walls, and animal booklets are being made in connection with the language and agricultural classes.

The teachers.—The seat of a State normal school is at Florence, only a few miles by trolley from the county seat of Colbert County. This is partially accountable for the fact that many of the teachers have had training in this school. Nearly half of those visited were graduates of a normal school, or had equivalent education and training. About two-thirds were teaching for the first time in the schools visited, and about one-third had no previous experience. Tables 20 and 21 show the education, salaries, and experience in full of the entire staff, exclusive of the towns.

TABLE 20.—*Education beyond the elementary grades, of teachers in Colbert County.*

Years of education beyond elementary grades.	Number of teachers having—	Percent
1 year.....	3	5
2 years.....	4	7
3 years.....	13	23
4 years.....	14	25
5 years.....	9	16
6 years.....	10	17
7 years.....	2	3
8 years.....	1	1+
Total teachers reporting.....	56	

TABLE 21.—*Experience and salaries of teachers.*

Experience.	Number of teachers having—	Salaries.	Number of teachers receiving.
None.....	2		
1 year or less.....	12		
1 to 2 years.....	11	\$50.00	1
2 to 3 years.....	9	62.50	1
3 to 4 years.....	3	65.00	18
4 to 5 years.....	3	70.00	22
5 to 6 years.....	6	75.00	11
6 to 7 years.....	6	80.00	3
7 to 8 years.....	2	85.00	3
8 to 9 years.....	0	90.00	4
10 years and over.....	3	95.00	1

Attendance on day of visit, Colbert County, Ala.

[Per cent present, 59.45.]

Enrollment:	Present.	Enrollment:	Present.	Enrollment:	Present.
72	80	87	25	23	27
33	10	38	28	71	50
25	20	59	84	25	18
46	23	83	42		
22	18	25	18	624	371
35	16	25	17		

Recommendations.—(1) The total school expenditure must be substantially increased. Money for maintenance through increased taxation and for buildings through bonded indebtedness will be necessary.

(2) New modern buildings should replace those now used, except in those places in which there are now State buildings. Probably 90 per cent of buildings observed were unfit for use.

(3) The term should be increased in length to nine months.

(4) More and better teachers are needed and higher salaries and a longer term are both necessary to procure them.

(5) Better high-school facilities are needed. The plan outlined for rural high schools on the 6-3 plan should be completed by one or

two senior high schools well located. The present county high school serves a small community only and is not a county high school in the right sense of the term.

V. MADISON COUNTY.

General background.—Madison County is in the northern part of the State in the Tennessee Valley. It is one of the richest and most productive of the strictly farming counties. The county seat, Huntsville, located near the center of the county, is the site of five large cotton mills. The Louisville & Nashville and the Southern Railways traverse the county. The population of Huntsville is between seven and eight thousand. That of the county, as a whole, is 47,041.

Corn and cotton are the most important and valuable of the farm crops. The total value of the farm crop production for 1918 was \$12,500,000. The population is made up of 59 per cent native whites of native parentage, about 1 per cent foreign born or children of foreign-born parents, and 40 per cent negroes. Of the population between 10 and 21 years of age 2,004, or about 17 per cent, are illiterate.

School conditions.—The school officials of Madison County are making a special effort toward consolidation of schools and securing modern buildings. Though a complete program is in no sense accomplished in this county, the buildings are on the whole better than in the other counties visited. A number of new schoolhouses, built on the State plan, especially two-teacher and five-teacher schools were observed. These are equipped with new desks and hyloplate blackboards. Five new buildings of this character were built in 1918, and four additional ones are in contemplation for 1919. During the past year the county spent \$21,691 on buildings and permanent improvements. More than half of this money was raised by subscription. The following statements concerning the status of schoolhousing are furnished by the county superintendent:

Buildings owned by the State.....	34
Building owned by the county.....	2
Buildings owned by private individuals or communities.....	21
Modern buildings meeting State requirements.....	38
School buildings with two toilets.....	35
School buildings with one toilet.....	17
School buildings with no toilets.....	5
Schools equipped with two sanitary toilets.....	11
School buildings equipped with hylo plate blackboards in good condition.....	38
Total white schools.....	57
Total colored schools.....	55

High-school facilities.—Madison County needs far better high-school facilities for the children in rural communities. The high

school at Huntsville is open to children outside the district only on the payment of tuition. The county high school is located at the extreme southeast portion of the county near the Jackson County line. It is altogether inaccessible to children outside its immediate vicinity.

Teachers' training:	Number of teachers.
Elementary education only.....	1
One year high school training.....	1
Two years high school training.....	10
Three years high school training.....	11
Four years high school training.....	32
One year higher education.....	15
Two years higher education.....	21
Three years higher education.....	16
Four years higher education.....	16
Teachers' salaries:	
Number receiving \$40 to \$45.50.....	3
Number receiving \$45 to \$50.....	1
Number receiving \$50 to \$55.....	21
Number receiving \$55 to \$60.....	19
Number receiving \$60 to \$65.....	40

The schools are supported from funds received from the State and a county tax of 3 mills. The valuation for county taxing purposes is \$13,500,000. The total amount received from the State and county for schools for the year was \$104,521. Of this total \$5,100 is for upkeep of the office of the county superintendent; \$79,489 for teachers' salaries; \$5,508 for maintenance; \$3,095 for transportation; and \$1,006 for other expenditures. The remainder was spent for buildings and permanent improvements.

The situation in Madison County, so far as upkeep of buildings and grounds is concerned, is unfortunately no improvement on the conditions as described for the State as a whole in a preceding chapter. There are, as stated, a number of new buildings. Most of these are well painted and attractive from the outside, but the majority, even of the new buildings, show utter neglect from the standpoint of cleanliness and care. The old buildings visited were in exceedingly bad condition. Most of them are unfit for school purposes from every standpoint.

The teachers.—Comparatively little actual teaching was seen in the county, as the visits were made near the close of the term. Examinations were being conducted and preparation for closing entertainments were being made in many of the schools. Such teaching as was observed does not depart from the kind described in the preceding chapter on conditions in the State. Some overcrowded rooms were found in the lower grades, and as occurred in most cases in the schools of Alabama, the children in the higher grades were few, while the lower grades were entirely overcrowded. The county

is another example of the fact that the attempt to do high-school work results disastrously for all concerned.

The county high-school pupils are housed in an old building which was formerly a private school. It is in very bad repair and entirely unfitted from the point of view of sanitation, convenience, comfort, and equipment to supply the requirements of modern school housing. It is located on a good site of about 5 acres of ground. Recently the county built an annex for home economics and manual training. The annex is a very good building, though poorly equipped for teaching the subjects for which it was intended. It seems to the committee an unfortunate waste of money. It is badly in need of care. The shower baths, which should be an attractive part of the school, are not only unused but are becoming entirely ruined from neglect and abuse.

There are three teachers in the county high school, all of whom have normal or college training. The annual enrollment is 35, but when visited by the committee only 28 were in regular attendance. Of these 18 live in the immediate vicinity of the school, that is, in the town in which it is located. There are no good, reasonably priced boarding facilities, so that only those children near enough to reach the school from their homes can attend.

Besides the equipment for manual training and cooking and sewing, which if kept clean and in good condition would probably be quite adequate for a small high school, there is some equipment for the teaching of physics and chemistry. The total is valued by the county superintendent at about \$1,000. The school is supported almost entirely by the State, from which it receives \$3,000 per year. The county supplied \$200 and \$300 were received from other sources during the past year.

The high school is in every sense a State supported, local, rather than a county high school. This feeling on the part of the county board accounts for the fact that practically none of its support comes from that source. The building needs extensive repairs to make it at all fit for use. In fact, if the high school is to remain in its present location, the building should be replaced by a new one of modern type. Present conditions ought not to continue.

The committee is of the opinion that the county board would not be justified in placing the kind of buildings needed for a county high school in a rich county like Madison in so remote a location as the present one. Good high-school facilities are badly needed, and should be made accessible to as great a number of children as possible through convenient location and through the provision of means of transportation and boarding arrangements. The committee believes that the 7-4 plan prevailing in the county should be discontinued.

and the 6-3-3 plan installed. Under this arrangement the high school at Gurley would give good service as a junior high school, several of which are needed. It appears feasible and economical for this portion of Madison County to unite with certain communities in the western portion of Jackson County. This inter-county arrangement would provide sufficient funds for maintaining a good junior high school, and as soon as permitted by legislative action, the territory could be made into a taxing and bonding district, and then a proper building could be provided. When the new plan of organization is put into operation, one or two well-equipped senior high schools should be placed by the county board in carefully selected accessible places.

Recommendations.—(1) More generous school support and money for buildings is needed in this as in other counties, and should be provided soon. The committee believes that school building is progressing in this county rapidly, but considering the need for more schoolhouses additional funds are essential.

(2) A continuous term of nine months should be established. The present term is too short and its division into two parts intensifies its inadequacy.

(3) A course of study adapted to rural community needs and prepared for the 6-3-3 organization should be provided. The county has practically no vocational interests other than farming and would be a very suitable county in which to put in operation the plan as recommended with a course of study having a distinctly rural tendency.

(4) The county is very much in need of closer supervision following the plan recommended in Chapter VII. The facts that consolidation is becoming more and more extended; that the shape and size of the county make it possible to reach schools with relative ease; and that the population is relatively evenly distributed, makes the supervisory problem one which can be solved effectively through the county superintendent and a corps of assistant supervisors.

VI. ESCAMBIA COUNTY.

Escambia County is selected as typical of the grass and timber section of the State. It is located in the southwest part and borders on Florida. The county is rectangular in shape; about 54 miles long by 18 miles wide. Two branches of the Louisville & Nashville Railroad and the Florida & Gulf Railroad cross the county. Brewton, the county seat, is the largest town and is located near the center of the county. There is a county high school at Atmore in the southeast corner of the county, and one additional four-year high school located at Brewton.

Physical resources.—The surface is generally level; the soil rich and adapted to the growth of fruits, especially oranges and peaches. Raising of early strawberries is an important industry. Lumbering is probably the most productive industry of the county. Data on the value of lumber and turpentine produced and fruit crops are not available. The total value of field crops, cattle, and hogs produced in 1918 amounts to \$4,269,000. It seems reasonable to believe that this amount would be substantially augmented by the value of strawberries, peaches, oranges, turpentine, and lumber. Timber is rated as the chief output. There are extensive stretches of uncut timberlands. Many portions of the county are indeed sparsely settled because of this, and one drives many miles through virgin timber to reach the schools found in the settlements on cleared land.

Unquestionably the county has economic possibilities and a bright future when the land is cleared and placed under cultivation. At present, however, timberlands are taxed on a very small valuation, from \$1.25 to \$4.50 per acre. Some idea of the amount of undeveloped and unsettled land may be gained from the fact that in spite of low valuations nearly 85 per cent of the total tax revenue is from the lumber and railroad companies. Land is retained in large tracts and there are relatively few small owners. In general the tenant farmers and the employees of lumber companies support the homes from which school children come. The total population of the county in 1910 was 18,889, of whom 13,156, or 69 per cent are white, and 5,569, or 30 per cent, approximately, are negro. There are in the county 590 persons from 10 to 20 years of age, that is of school age, who are illiterate. This is 12½ per cent of the total population from 10 to 20 years of age.

System of taxation.—Escambia County is one of the few in the State which levies not only a county tax, but a local district tax in all but two of the districts. In addition to the county and district levies, three districts have succeeded in borrowing money through notes of the trustees—the amounts are respectively \$1,000, \$1,500, and \$2,000. This money is used for buildings and repairs. To pay these notes the district pledges its local tax for as many years as are necessary to pay the full amount of indebtedness. This means, of course, that no additional expense is involved. The notes merely represent drawing in advance on regular tax fund. The plan enables a district, however, to provide a building, if an inexpensive one will serve, immediately, when otherwise a delay of several years is necessary. The assessed valuation of the county is \$7,466,284. The receipts for the school year just closing were as follows: From State funds, \$22,565; from county tax, \$21,566; from district tax, \$17,538, a total of \$60,965. Of this amount \$6,820 was spent for repairs and equip-

ment; \$3,646 for administrative expenses, and the remainder for buildings and teachers' salaries.

School sanitation.—Here, as elsewhere, a choice must be made between decent buildings in which to house the school children, and reasonable classroom efficiency as represented in teachers' salaries and length of term. To secure both is patently impossible with the totally inadequate funds at the disposal of the board. The board of education, therefore, after consideration, decided that buildings fit to shelter children must be obtained first—even at a sacrifice of other essentials. Distinctive progress has been made toward this end though it is far from completely accomplished. Black boards of hyloplate in sufficient quantities and patent desks have been installed this year in practically all the school buildings, replacing painted boards and homemade benches.

This county, like many others in Alabama, had entirely disregarded sanitary essentials when providing buildings. There was a disgraceful lack of toilets such as satisfy the demands of mere decency. Thirteen schools are now supplied with two sanitary toilets built according to the State plans. Fifteen additional schools have two toilets of some kind, not sanitary, however, and some of them in very bad condition. Eighteen schools still have but one, and twelve have none whatever.

Pure water within reasonably easy access and available at all times for drinking purposes as well as for washing hands is obviously a simple necessity for every school. However, neighbors' wells or impure springs have for years been the source of supply for the majority of schoolhouses in the county, and no method of keeping the water in the building other than open pails and common dippers was provided. The task of supplying good wells and sanitary coolers was assumed by the board for the present year. A systematic campaign for these and other essentials was carried on in part through a system of standardization. Requirements for the different classes of standard school are very moderate, yet progress is being made and ideals are gradually being instilled. A substantial improvement is noticeable between those schools standardized and those which are not. Accomplishments in this regard are shown on the map and following are requirements for each class of standardized schools:

SUPERIOR.

1. State buildings with two rooms or more employing two teachers.
2. Yard well kept and all trees on school grounds whitewashed.
3. Buildings painted.
4. Plenty of hyloplate blackboard, decorated.
5. Seated with patent desks.
6. Library and bookcase.
7. Some good well-framed pictures on walls in each room.

8. Sanitary toilets.
9. Wholesome water supply on school grounds.
10. Sanitary drinking fountains.
11. School organized into active improvements, war savings or Red Cross society.
12. Good display of school work on walls.

EXCELLENT.

1. State building, painted.
2. Well-kept yard with trees whitewashed.
3. Two toilets.
4. Seated with patent desks.
5. Library.
6. Hyloplate blackboard, decorated.
7. Individual drinking cups.
8. Good display of school work on walls.
9. School organized for some form of war work.

FAIR.

1. State building.
2. Well-kept yard.
3. Seated with patent desks.
4. Hyloplate blackboard.
5. Individual drinking cups.

POOR.

1. Land not deeded to the State.
2. No patent desks.
3. No hyloplate blackboard.
4. Yards poorly kept.
5. No individual drinking cups.

Under the old régime of district control no records worthy of the name were kept either by the teachers or superintendent. A splendid system is now installed for both school and office records. Daily, monthly, and annual reports are required of the teachers and are systematically inspected, corrected, and filed. The old idea of private ownership of school grounds and buildings is being eradicated gradually and legally recorded deeds are being required by the board. Plans of school grounds with attached deeds and even the unfortunate loss of school sections within the county is being investigated with the possibility of recovering some of this now valuable property.

Instruction.—Salaries and qualifications of the teachers of the county are given in the following tables:

TABLE 22.—Salaries and certificates of Escambia County teachers.

Receiving per month:	Teachers.
\$40.....	86
\$50.....	88
\$55.....	10
\$60.....	27
\$65.....	18
Total.....	229

TABLE 22.—Salaries and certificates of Escambia County teachers—Continued.

Grade of certificate:	Teachers.
First.....	40
Second.....	46
Third.....	35
Life.....	3
Total.....	124
Classification for last year:	
First.....	29
Second.....	47
Third.....	36
Total.....	112

TABLE 23.—Education of teachers in Escambia County.

Years of education beyond elementary grades.	Number of teachers having—	Per cent.
1 year.....	6	14.6
2 years.....	8	19.5
3 years.....	3	7.3
4 years.....	11	26.8
5 years.....	1	2.4
6 years.....	11	26.8
7 years.....	1	2.4
8 years.....		
Total teachers reporting.....	41	100

Teachers are classified by the county board according to their qualifications and ability, with salaries of \$40, \$45, and \$50 for third, second and first class, respectively. These salaries are supplemented from funds raised through district taxation and reach a maximum of \$65 with an average of \$55 for the county. The school term is six months. In most cases it is divided into two sections:

The classroom instruction is of the kind described in the preceding chapter and little teaching of a high quality was found by the committee. It was practically all on the "lower plane" as distinguished by Dr. McMurtry, meaning that "it shows that neither teachers nor supervisors are looking beyond the storing of knowledge and the acquisition of mechanical skill." Evidences of supervision are apparent throughout the county; for example, topographical maps, drawings, written work, and the like are displayed in practically all the rooms. However, supervision is not close enough to influence the methods of teaching to any notable extent, and there is no evidence of unified aim and purpose among the staff. With a teaching body of 124, more than half of whom are in one-teacher schools, one supervisor is quite inadequate. This is especially true when the force is largely untrained, inexperienced, and new to the work in the particular county and school. Indeed, even trained

teachers easily fall back into routine methods of teaching without the spur of careful direction and surveillance.

Consolidation of schools.—Escambia County has 53 one-teacher, 13 two-teacher, 4 three-teacher, and 4 four-teacher schools. The two towns, Brewton and Atmore, have five or more teachers. The prevailing type in the county is the one-teacher school, of which there are altogether too many, even allowing for the relatively unsettled condition of a large portion of the county and the ever-present road problem. Consolidation in this county is not so much a matter of educating the people to the desire for centralization, as to educating them to the appreciation of the value of education and the necessity of paying for it with reasonable liberality. Consolidated school buildings cost money and this the people are reluctant to supply. Some progress is being made, however. The board is in many cases refusing new buildings until consolidation can be effected. People should also understand that even money value of land is increased by good school buildings and qualified teachers, as well as the fact that the progressive citizens needed to develop the county will settle there only when educational facilities are furnished for the children. A certain citizen who paid \$13,000 for a farm near McCulloch in the western part of the county is authority for the statement that he would not have paid more than \$8,000 if it were not for the proximity of the consolidated school.

Attendance on day of visit, Escambia County, Ala.

[Per cent present, 66.33.]

Enrollment:	Present.	Enrollment—Con.	Present.	Enrollment—Con.	Present.
52	42	92	69	24	22
43	35	41	25	28	12
44	22	89	51	45	22
50	25	31	24		
29	26	41	28	609	403

Escambia County is not poor in land and resources. If it is to be developed to its fullest possibilities it must be peopled by an intelligent citizenry, trained in efficient public schools. Such schools it is the duty of the county to supply, even if a sacrifice be necessary. The committee found the county board and superintendent able, broad-minded, and alert. It is convinced that the money supplied will be used economically and for the best interests of the children.

Recommendations.—(1) More and better buildings and more liberal support for schools must be provided. The assessed valuation of the county is exceedingly low. It should be raised, and the 3-mill limit raised as soon as the legislature makes it possible. A scheme for consolidation and a systematic building program for the county

should be inaugurated and consummated at the earliest possible date. The schools suffer for every month of delay.

(2) Better salaries and longer terms must be established in order that experienced teachers may be secured.

(3) At least one additional supervisor, preferably a primary supervisor, should be engaged at once. The amount now paid to the county agent by the board of education, from which the schools receive only remote, if any, benefit, if augmented by another \$600 or \$700 would probably secure a satisfactory person. Later, other supervisors should be engaged.

(4) A continuous term of nine months should be established as soon as funds are available. The division of a short term of six months into two parts makes efficient work impossible.

VII. PICKENS COUNTY.

Pickens County is selected as an agricultural county in which progressive methods of farming are not yet followed. In the proportion of white and negro children it is reasonably typical of counties of this class.

It is situated in the western part of the State and embraces an area of 875 square miles, with a population, in 1910, of 25,055. Of these 51.7 per cent are colored.

Agriculture is the leading industry, the principal products being cotton, corn, and hay; oats, sugar cane, and other crops are grown on a rather small scale and meet the local demands only in part. Except in the case of a few of the most progressive farmers, present methods of farming are practically identical with those which have been in use for years. The greater part of the country is hilly, broken and rough; other portions are level or gently rolling. The northern part of the county has much timber, which is being rapidly cut away. Lumbering in this section has attracted many from the farm, especially white laborers.

Financing the schools.—The assessed valuation of Pickens County is \$4,815,080. As in other counties, it is only a small fraction of the real value. Farms selling at \$50 to \$75 an acre are assessed at \$10 or \$15, or even less. At a conservative estimate, the assessed valuation could well be 12 millions. There is a county tax of 4 mills, the maximum permitted, but not district tax. Tuition is charged in all towns in order that the schools may be in session eight or nine months. The town of Aliceville, for illustration, charges \$5 a month for the eleventh grade; \$3.50 a month for grades eight, nine, and ten; \$3 for grades four, five, six, seven; and \$2.50 for grades one, two, and three. Tuition in the eleventh grade is charged during four months; in all other grades for two months. At Carrollton

there is a matriculation fee of \$2.50, a monthly fee of \$1 for each of the elementary grades, and of \$1.50 for each of the high-school grades. This and the State funds are entirely insufficient for support and buildings. The total amount spent for schools for 1918 was \$8.28 for each child.

Administration and supervision.—Legally the county board of education acts upon the recommendations of the county superintendent of schools, who nominates all teachers. In many cases however the district trustees take the initiative. The county superintendent and the county board merely ratify the choice of the local boards. No doubt these boards should be consulted regarding the selection of teachers, but all nominations should originate with the county superintendent and appointments made by the board.

The county superintendent can not supervise effectively unless assistants are provided. There are so many duties to which he must attend that he has but little time for the supervision of instruction. He must look after the finances of the schools; carry out a building program; keep the people informed as to the needs and make plans for the future; in short, he must be the educational leader of the community. Since few teachers have had adequate preparation, they must be improved in service. This can not be done without assistant supervisors.

City systems with better trained teachers and school buildings close together employ several supervisors for the same number of teachers as Pickens County has. A supervisor of music should be among those employed and music should be one of the school subjects. At present it is not taught at all in the county.

Among the commendable things that the county superintendent is doing to help teachers grow professionally is the organization of reading circles in several sections of the county; but these reading clubs, valuable as they are, do not take the place of constructive criticism of classroom teaching. There should be enough supervision to see that the teachers make intelligent use of what they read.

Consolidation of schools.—The county school board until recently has been increasing instead of diminishing the number of school districts. As a result there has been little consolidation of schools. The tendency has been to erect school buildings in every district asking for one. The consolidation of schools has not been considered seriously either by the school officials or by the patrons of the schools. There is in the county only one transportation wagon. One reason consolidation has not been seriously discussed is that the roads are almost impassable in winter, especially the roads crossing or paralleling the many sluggish streams. Yet in spite of poor roads some consolidations could be effected. At least the plan of dividing school districts

and erecting one-room school buildings could be abandoned. As an illustration, a new one-room building has been erected about three miles from Reform, though the children attending this school could well be transported to the school at Reform. Similarly, other consolidations might be effected. In the northeastern part of the county, four schools—New Hope, Carroll, Cross Roads, and Hargrove—might be consolidated at Shiloh Church. In the eastern part of the county there was once a school at the point indicated on the map where six roads center. This school enrolled 180 pupils, but new districts were formed and several schools are attempting to do what one good consolidated school could do much better. The schools that could be consolidated here are Center Springs, May, Flatwoods, Brannen, and possibly Kenny Hill. Other illustrations could be given. Consolidation, however, can not be effected until the roads are improved and there are more funds to transport the children. If a sentiment for consolidation were created, better roads would result. The practical plan for Pickens County is to form a good consolidated school at some point where it will most likely prove successful. Shiloh Church would probably be the best location. After this school proves successful other consolidations could be effected. In the meantime the school board should district the county, looking forward to consolidation.

School attendance.—The school registers of the county were examined and it was found that attendance during the compulsory period was but little better than during the other months of the year. The attendance during the compulsory period would naturally be better because it comes during the months when there is no work on the farms. The poorest attendance is in the fall of the year, when the crops are being gathered, and in the spring when the crops are being planted. During these seasons the attendance in many schools is about one-half what it should be. Few of the older children are in school. As one goes by farms in the spring of the year, many children may be seen in the fields. Data were collected from 21 classrooms regarding attendance. Of 455 pupils enrolled during the year, 817 are now (April) enrolled. On the day the writer visited the schools 270 were present. Three town schools where the attendance is better than in the country districts are included. One school a short distance from Carrolltown which had a total enrollment of 44 now has only 18, of whom 18 were present on the day of the visit. The total enrollment of white children in the community up to March was 2,805. At the end of February there were enrolled 2,287. The average attendance up to that time had been 1,738, or 60.7 per cent of the total enrollment.

That a picture might be had of school attendance in Pickens County three school registers for the year 1918 were selected at ran-

[illegible]

FIG. 11.—The dots indicate daily absences from school.

dom and the attendance data for each pupil copied for the months of January and February. It may be noted that most children were in school for a few days and then out for as many days.

Preparation of the teachers.—Of the 85 white teachers in Pickens County, 6 hold life certificates; 15, first grade; 34, second grade; 30, third grade. Thirteen have been graduated from high school; 12 from normal school, and 6 from college. Three have attended normal school one year; 6, two years, and 8, three years. Forty-two have had no schooling beyond the elementary grades or only a year or two of high-school work. It is evident that the educational qualifications of teachers in Pickens County are low; the only way to obtain teachers of higher qualifications is to pay more salary.

Teachers have been paid on the basis of the kind of certificate they hold. The salary of a teacher with a third-grade certificate is \$45.00 a month; with a second-grade certificate, \$55.00, and with a first-grade certificate, \$65.00 a month for a term of six months. Owing to lack of funds it is impossible to employ many teachers with first-grade certificates.

School buildings.—The school buildings in Pickens County may be classed as being in a good state of repair. There are, of course, some exceptions, as, for example, the school building at Pickensville, which should be torn down and a new one erected. Several new and modern buildings have been erected on the State plan. The funds for the erection of the new buildings were obtained by subscription. The movement to provide better buildings is to be commended, but not the movement to increase the number of districts and school buildings.

It is to be regretted that there are so few forward-looking movements in Pickens County. The county superintendent, however, is beginning to suggest the consolidation of some of the schools and to advocate better buildings. The employment of a clerk for part of the year is to be highly commended. One or two of the districts are beginning to talk about levying a district tax.

Recommendations.—(1) The schools of Pickens County can not be much improved until more funds are provided, therefore steps to this end should be taken as soon as possible. (2) The first means the county board should use to improve instruction is to employ one or more supervisors to help teachers in service. (3) In order to improve the schools, the county should build good roads, since consolidation will be impossible with the roads as they are. (4) The county school board should district the county with a view to consolidation. (5) There should be fewer school districts. A school district should not be composed of one school, as is now the custom.

VIII. ETOWAH COUNTY.

General backgrounds.—Etowah County is typical of several small and thinly populated counties in which coal and mineral are found, and the resources of which are therefore mining and industrial as well as agricultural. It is situated in about the center of the northeastern quarter of the State, and embraces an area of 542 square miles. The population is 39,109, only 17.4 per cent being colored.

Within the county are three small cities, Gadsden, Alabama City, and Attalla, with a combined population of 17,393, or 44.5 per cent of the total. There are two other incorporated towns, Altoona with a population of 1,071, and Walnut Grove with a population of 204. The remainder of the county is rural. In the cities are cotton mills and car shops. Coal is mined in the western part of the county, principally around Altoona.

The assessed valuation of the county, the cities included; is \$13,500,000. It is estimated that property in the county is assessed on an average at not more than 28 per cent of its value. In many instances it is not more than one-tenth of the real value. For illustration: A farm for which \$6,600 was refused is assessed at \$600. Other properties that would easily sell for \$25,000 are assessed at \$4,000. Generally there are two entirely different values placed upon farms and business properties—one for the tax assessor and the other for the purchaser.

Financing the schools.—There is a three mill county tax, and a district tax in 10 districts. The funds raised by each district are small, as may be noted from the following table:

TABLE 24.—Amount raised by district tax in each of 10 districts.

Glencoe	\$800
Hokes Bluff	185
Moody	250
Oak Grove	85
Ewing	170
Amosa	190
Ivatee	375
Beard	180
Mount Zion	825
Alabama City	8,000

The money raised by local tax is used to help erect new school buildings, to make improvements and in some cases to add a few weeks to the school term. Though the amount raised by district tax is not large, it is needed in all districts to take care of school improvements and add to the salaries of teachers. If every district in the county should levy the special tax \$40,500 could be added to present income. The county board should first redistrict the county with future consolidation in mind.

Administration and supervision.—The school board of Etowah County elects a county superintendent of schools and then holds him responsible for results. He makes his recommendations to the board. These are acted upon and the superintendent is directed to carry out the action of the board. For illustration, the board after voting to investigate the possibilities of opening schools for illiterates directed the county superintendent to make a study of the situation and to report his findings and recommendations regarding the establishment of such schools. This is a much better plan than that of appointing a committee composed of several board members.

The county board permits the superintendent to look anywhere for teachers. He may even bring them in from another State, which he does. The district trustees, while consulted regarding school improvements needed, do not take the initiative in the selection of teachers. This is as it should be.

One of the needs of the county is more and closer supervision. The first step would be to employ a clerk for the superintendent so that the latter may have all his time free for administrative and supervisory duties. As it is, he must spend no small part of his time in clerical work, typewriting letters, compiling data, keeping books, etc. It is uneconomical to pay a superintendent \$1,800 a year and then require him to do the work of a clerk who could no doubt attend to clerical duties better than the superintendent.

In addition to the clerk, assistant supervisors should be employed. A primary supervisor is most needed and should be appointed at once.

Careful observation was made by a member of the survey committee of the teaching in many of the schools of Etowah County. While most of the teachers are faithful and earnest many need more help than they are receiving. Not a few were falling just short of success for want of assistance. The county superintendent, it is true, visits the teachers several times a year for short periods, but his visits are necessarily so few and so brief that he can not follow up the directions that he gives the teachers. He does not have time to help them plan lessons. Few of the teachers understand how to teach reading in the primary grades. Children in the second and third grades read no better than children should in the first grade. A supervisor skilled in the teaching of reading could change all this.

School attendance.—Although the school term in Etowah County is 7 months long, many of the children enrolled attend but a few months. Most of the older pupils do not enroll until after school has been in session a month or more, and as soon as the time for planting arrives they drop out of school. The latter part of April, when one of the survey committee visited the schools, it was necessary for the county superintendent to order several to close because the attendance had dropped so low. In the 34 classrooms visited the enrollment

had fallen from 1,571 to 992. There were present on the day the schools were visited only 656, or 41.7 per cent of the total enrollment, and 66.1 per cent of the enrollment when the schools were visited.

The total number enrolled in the white schools up to April was 5,360, the number enrolled in the month of March was 4,082, and the average attendance up to April was 3,242.

As recommended elsewhere in the report, the compulsory attendance law should be in force for the entire school year, but even if it were, a sentiment for better attendance would need to be aroused. The necessity of attending school for 7 or more months must be made evident to the parents, the majority of whom keep their children out of school to work on the farms in the fall and spring. Teachers can do more than any other persons, if they make school work interesting, and make personal visits to the homes, explaining to parents why children should attend school for the full term. In several schools visited the attendance had been good for the entire year; few had dropped out for the spring work. The teachers of these schools were community leaders, the parents had confidence in them, the children preferred school to farm work.

Teachers' salaries.—The salaries of teachers in Etowah County are based partly upon the kind of certificate held and upon experience, but the largest factor is ability in classroom management and instruction. The salaries for teachers and principals range from \$45 to \$125 a month for 7 months, distributed as follows: Thirty-six teachers at \$45 to \$55; 42 at \$56 to \$65; 21 at \$66 to \$75; 9 over \$75.

Preparation of teachers.—The qualifications of teachers measured by the kind of certificates held are low, 36 holding first grade certificates, 42 second grade, and 33 third grade. As soon as the supply of teachers becomes greater or as soon as the funds warrant, no teachers with third-grade certificates should be employed. The average teacher in the county has completed an elementary school course of 7 grades and two or three years of high-school work. A few are normal school graduates. A majority have taught less than four terms.

Buildings, grounds, and equipment.—There are in the county, exclusive of the cities, 79 school buildings for whites and 5 buildings for colored. Only those erected within the past few years are properly lighted. About one-half of the older buildings may be rated as in a fair state of repair, one-fourth as good, and one-fourth as poor. Some of the districts are taking pride in keeping the school buildings in good condition. This is particularly true of the districts that have levied the special tax.

The school grounds average from 1 to 2 acres and the play space from one-fourth to one-half acre. A few are equipped with

basket-ball courts. None of the school grounds have school gardens. About one-fourth of the schools have only one outhouse. Not a few of these are in a poor state of repair and in poor sanitary condition. At about two-thirds of the schools there is a spring or well in or near the school building. A neighbor's well furnishes the drinking water for one-third of the schools. The drinking water is kept in open pails at one-half of the schools and in closed receptacles at the others.

The desks in three-fourths of the schools are unadjustable double desks. In a few schools there are adjustable single desks. The teaching equipment is meager. In most school buildings there is insufficient blackboard space. Maps and other teaching aids are rarely seen. The school board at a recent meeting, realizing the need of better teaching equipment, voted upon the recommendation of the county superintendent, that the county board would pay one-half the cost of the teaching equipment recommended by the superintendent provided the local district would pay the remainder.

Consolidation of schools.—Owing to a lack of funds and to the mountainous character of the country no attempt has been made to consolidate schools where transportation is required. A good consolidated school has been effected at Bryce by uniting two other schools with the one at that place. Instead of three poorly equipped one-room school buildings there is a modern three-room building with rooms for manual training and home economics, which will probably be introduced next term.

Consolidation could be effected at several other points in the county but transportation would be necessary. It would be well for the county board to district the county looking toward consolidation and then at the earliest moment provide transportation for children attending one-room schools that could be consolidated.

Plans for future.—Some plans just adopted or that are likely to be adopted within a year or even less are: Summer schools for illiterates, a clerk for the county superintendent of schools, one assistant supervisor to have supervision of instruction in the primary grades, the purchase of teaching equipment, the redistricting of the county, and the introduction of a vocational agricultural school.

Recommendation for improvement.—All the foregoing plans should be put into operation at the earliest possible moment.

It is further recommended that:

- (1) The county board should employ assistants to supervise instruction in all grades.
- (2) Add the constitutional one-mill tax so as to make the tax rate four more mills. This would net the county about \$13,000 extra.
- (3) The school board and the county superintendent should make careful study of the location of school buildings and district the

county with future consolidations in mind. A district tax should be levied on every district after this has been done.

(4) A campaign for better school attendance in the fall and spring months should be waged, and the compulsory attendance law enforced.

(5) The county superintendent should not accept a teacher's monthly report until it has been made correctly.

(6) The teachers should be required to keep the school buildings clean, well swept, and dusted.

IX. CHAMBERS COUNTY.

General background.—Chambers County is situated in the eastern part of the State and embraces an area of 588 square miles. It was selected for special study because it is typical of a good cotton growing and manufacturing county. With the exception of a small section in the eastern part, it is largely rural. There are five towns in this section, all engaged in the manufacture of cotton goods. Lanett, the largest, is an independent school district. Four others, Shamut, Langdale, Fairfax, and Riverside, have each a population of less than 2,000. The other towns in the county are in the farming section. They are Lafayette, the county seat, Fivepoints, and Milltown. The principal crop is cotton. As one rides through the county one sees hundreds of acres under cultivation, broken here and there by small patches of woodland. The soil produces abundantly. Prosperity among the farmers may be noted on every hand.

The assessed valuation of the county, which is recognized as one of the best farming counties in the State, is \$9,500,000. The large cotton mills at the five towns are included in this valuation. From inquiries made among business men and others it is evident that this valuation of property is very low. It could easily be three to five times what it is without exceeding the real value. The population of the county is 36,056. There are 17,396 whites and 18,660 negroes, the negro population being 51.8 per cent of the total population. The white population is native born.

Financing the schools.—Chambers County has voted the 3-mill county tax in addition to the 1-mill constitutional tax. None of the districts have levied the special district tax, but several contemplate doing so. In order that the schools in several of the districts may be in session for 9 months instead of 8, as provided by the county board, and in order to obtain teachers of higher grade than the funds allotted the district permit, several districts supplement the county funds by tuition fees and by donations. The cotton mill, for example, is an example. The company adds \$5 to the salary of each teacher, and pays for an extra month of school. It also provides the textbooks. All the school buildings in the mill town have been erected by the mill company and are its property.

At Lafayette an incidental fee is charged each pupil and the city council makes appropriations for an extra month of school. At Five Points all the money raised for municipal purposes is expended on the school. Most of this fund, however, is used to pay interest and to provide a sinking fund for the payment of bonds issued for the erection of a new school building. A small incidental fee is charged each pupil.

As in most other counties in the State, there is a lack of funds due in part to the low tax valuation. If the assessment were doubled the county would derive \$38,000 in addition to what it now does. This would enable the board to employ teachers holding first-grade certificates. Each district should levy a special tax, which should be used for building purposes and for upkeep of school property. In this way \$28,500 more could be expended on the schools in the county.

Administration and supervision.—The school board of Chambers County wisely places responsibility upon the county superintendent. He studies the needs of the schools and reports to the county board, which acts upon his recommendations. The local trustees are consulted regarding educational matters in their respective districts, but do not select teachers. The principals at Lafayette and at the mill towns are consulted when teachers are selected for their respective schools, since they are more familiar with the work of the teachers under their supervision than is the county superintendent. The annual budget is estimated by the county superintendent. The writer attended a meeting of the Chambers County board of education when it was discussing the estimates of the county superintendent which were \$2,000 more than the funds warranted. The board directed the superintendent to find some way to provide the \$2,000 needed, and to report at a special meeting. He found that by making certain consolidations \$2,000 could be saved. The plan of placing full responsibility upon the county superintendent can not be too highly commended. He is employed by the board to manage the schools. It would be a waste of funds not to permit him to do so.

As in many other counties, the schools of Chambers County are under-supervised. At present the county superintendent performs much work of a clerical nature. He should have a full time clerk, and as many additional supervisors as are necessary to carry out the plan advocated in this report. One of the county supervisors might well be assigned to the schools in the four mill towns provided the staff were large enough. All principals should have free time for supervision.

The plan of having a high school in each of the mill towns in Chambers County entails a waste of money and energy, and is less efficient than one high school for the four towns, which are under the

management and control of the county board of education. If it is not feasible to consolidate the high schools in the five towns, the pupils at Shawmut, Langdale, Fairfax, and Riverview should be sent to some central point. The street-car line through these points makes transportation easy. At present classes are too small for interest or economy. At Riverview there were only 4 pupils in the eighth grade and 5 in the ninth. The largest high school at Fairfax enrolls 28 in the eighth grade, 5 in the ninth, 7 in the tenth, and 4 in the eleventh. In the month of February the total enrollment in the high-school grades of the four towns was 74, and 8 teachers were employed. If there were one central high school for these 74 pupils, fewer teachers would suffice. However, the saving in the number of teachers and in the amount of money expended is of less importance than efficiency. Home economics could be taught more effectively; industrial work introduced; a wider range of subjects offered; and more interest would be aroused in the school.

Consolidation of schools.—One of the best examples of consolidation of rural schools in Alabama is to be found at Five Points, Chambers County. This consolidated school was formed by combining three country schools with the school at Five Points. The school term at each place had been 7 months. Now the children attend 9 months. The total attendance in all the schools consolidated was 113. Now there are 190 pupils. Before consolidation the high-school enrollment was 13, and now it is 52. The increase in enrollment in the elementary grades has been 68 per cent and in the high school 300 per cent, while the expense of conducting the school has increased only 50 per cent.

Other consolidations are possible since the roads are in good enough condition for transportation. Six roads center at Penton where there are three teachers and 90 children enrolled. Two other schools, Chapel Hill, which is $1\frac{1}{2}$ miles east, and Red Hill, which is $2\frac{1}{2}$ miles west, could be consolidated with the Penton School. There are two teachers and an enrollment of 40 at Chapel Hill, and two teachers and an enrollment of 45 at Red Hill. Only a few of the children attending these two schools would need be transported. One good school with six or seven teachers and an enrollment of 175 or more pupils would be possible. La Fayette might well be the center of consolidation for Morefield, Hamburg, and Rutledge. Hickory Flat, Stroud, and Welsh could be consolidated at Welsh for the elementary grades, while the high-school pupils were transported to Five Points. Other possibilities will suggest themselves to those familiar with the county.

Arrangements have been made to consolidate several negro schools at La Fayette, and to provide a training school in connection with this

consolidated school. In the northern part of the county, three colored schools will be abandoned, and a consolidated school established.

Buildings, grounds, and equipments.—For several years but few repairs were made on the school buildings, and as a result some of them became more or less dilapidated. At present the county board of education is encouraging the local communities to keep their school buildings in a good state of repair. Of the rural school buildings visited in the county, the majority may be ranked as being in a fair state of repair, many in poor condition, and a few in a good condition. Most of the buildings could be kept cleaner than they are. Practically all are swept with a broom without sweeping mixture. An exception must be made of the building at La Fayette. Since most of the buildings were erected some years ago, the lighting arrangement does not meet modern standards. In most buildings there are cross-lights, the light generally coming from both the right and left and in not a few instances also from the rear.

The school grounds average from one to two acres with about three-fourths of an acre additional, on which are often found basket ball courts, but no other play equipment. Outside toilet facilities are usually provided for both girls and boys. At a few schools, however, there are no toilet facilities, and at a few others only for girls. The sanitary condition of most of the toilets should be improved and should be more carefully inspected, repaired, and cleaned.

The school desks as a rule are double and stationary. A few of the newer desks are single. The teaching equipment is meager. Here and there in the rural school a map or globe may be seen. Reading charts for the primary grades are not provided except in several of the town schools. There are a number of good libraries. Those of 85 schools are valued at \$10,404. Now and then one enters a classroom made attractive, as are those at La Fayette, by well selected pictures. Teachers in other schools in the county should take the classrooms at La Fayette as models in this particular.

School attendance.—Parents in Chambers County have not yet realized that the child that is not kept in school regularly for the full term can not make satisfactory progress. As in other sections of the State farm work has precedence over school work. The immediate income of the farm is tangible, while the value to the child of having his life broadened and enriched by the school is not so near nor so tangible. One of the weaknesses of the schools is the poor attendance in the fall of the year and in the spring. For example, the enrollment in the schools visited was 969 for the year. Of this number 707 were enrolled in April. Of the 707 enrolled only 548 or 56.5 per cent of the total enrollment were present the day the schools were visited.

Preparation of the teachers.—A majority of the teachers in Chambers County hold life or first grade certificates; 25 hold life certificates; 56, first grade; 49, second grade, and 4 third grade. Of the teachers reporting 15 per cent have not attended school beyond elementary grades except possibly a summer term or two at a normal or college. Only 40 per cent have graduated from high school, 10 per cent from normal school, and 3 per cent from college.

Teachers are paid according to the grade of certificate held. A teacher holding a first-grade certificate receives \$62.50; one holding a second grade certificate \$52.50, and one holding a third grade \$47.50 a month for a term of eight months. Principals of graded and town schools receive from \$75 to \$150 a month.

Plans for future.—The county superintendent and county school boards are emphasizing the need of better school buildings and of school consolidation. The aim is to eliminate the high-school grades taught in the one and two teacher schools and to have all children pursuing high-school subjects attend the county high school or one of the other high schools in the county. A special study of health conditions is under way and the school board will adopt such plans as may be feasible for the improvement of the health of school children. Two Negro consolidated schools will be established next term.

Recommendations.—1. The county board of education should employ a full-time clerk for the county superintendent and several assistant superintendents or supervisors.

2. The plan of having a high school in each of the mill towns should be abandoned and one high school established for the children attending the high schools at Shawmut, Langdale, Fairfax, and Riverview.

3. A better system of records should be kept. The county superintendent should not accept a teacher's report until she has compiled all the data required.

4. The county should be redistricted with future consolidation in view.

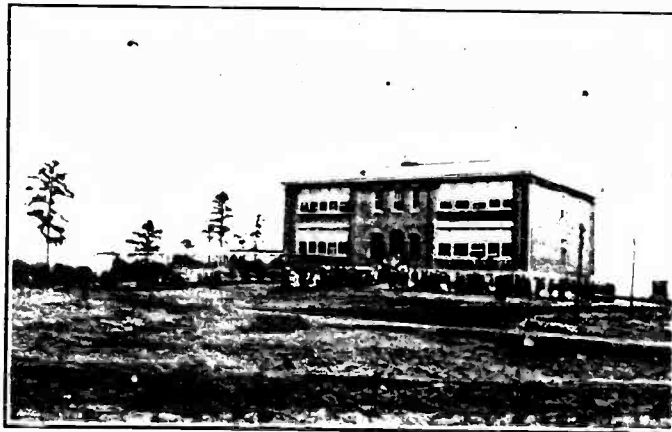
Chapter IX.

NEGRO EDUCATION IN RURAL ALABAMA.

Size and distribution of Negro population in the State.—According to the census of 1910, the Negro population in Alabama was 908,282, forming 43 per cent of the total population of the State. The Negro population of Alabama is smaller than that of either Georgia or Mississippi, and does not constitute so large a portion of the State's population as it does in the two adjoining States. The presence of the Negro, however, complicates the educational problem to the extent that it makes necessary the maintenance of two school systems, one for each race. But it should be borne in mind that even if the entire population of the State were white, it would be necessary to provide far more teachers and schoolhouses than are now provided for the white population, with a resultant increase in cost to the State.

The proportion which the Negroes form of the total population varies greatly in the counties. There are 21 counties where the Negroes outnumber the white people. These counties, referred to as the "black belt," form a block extending across the south central portion of the State. On the other hand, there are eight counties with less than 500 Negro children of school age, according to the State biennial census of 1918. With the exception of Cleburne County, the "white" counties—those with less than 12½ per cent of their population Negro—form a belt across the northern portion of the State. Numerically, the Negro population is largely massed in the "black belt." The census of 1910 showed that the 21 counties where the Negro population exceeded the white have practically 490,000 Negroes, as against 418,000 in the other counties; and 90,617 of those living outside the "black belt" were in Jefferson County.

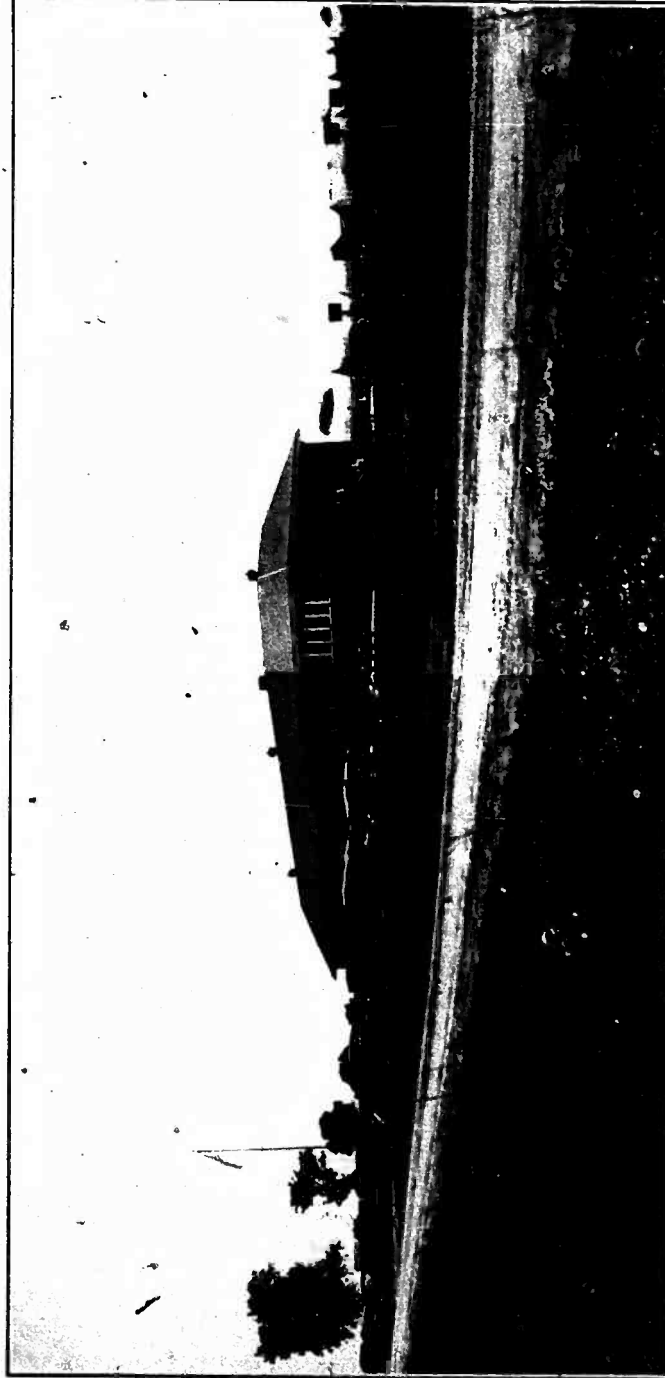
While the Negroes of Alabama form only 43 per cent of the total population, they constitute 52.9 per cent of all the persons engaged in agricultural pursuits in the State. The number of farms cultivated by them increased 17.3 per cent between 1900 and 1910. As farmers, renting and owning land, they have complete charge of 5,083,552 acres; as farm laborers they undoubtedly cultivate a much larger area. Of the colored persons 10 years of age and over, 40.1 per cent are illiterate, and 27.5 per cent of those 10 to 14 years of age are



A. CONSOLIDATED SCHOOL AT FIVE POINTS.

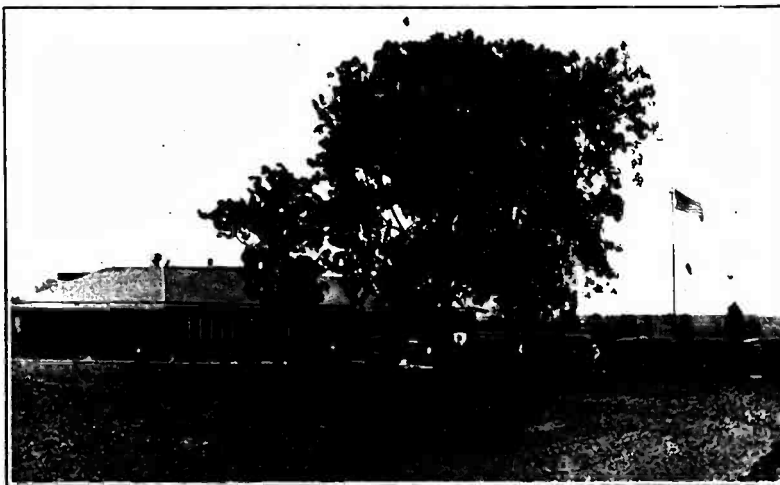


B. ANOTHER CONSOLIDATED SCHOOL IN ALABAMA.



MAY DAY CELEBRATION AT THE PIKE ROAD CONSOLIDATED SCHOOL, MONTGOMERY COUNTY.

This school has 30 acres of good agricultural land and is planning to erect a \$16,000 home for its teachers.



A. THE NEW PIKE ROAD CONSOLIDATED SCHOOL, MONTGOMERY COUNTY.



B. THE AUTOMOBILE TRUCKS AT PIKE ROAD CONSOLIDATED SCHOOL.

illiterate. The death rate among the Negroes is nearly twice as high as among the white people. Such a degree of illiteracy and ill health is certain evidence of extensive waste of economic resources and human energy.¹

No discussion of the Negro population would be complete without reference to the Negro exodus from Alabama in 1916 and 1917. This movement was due to a combination of causes, both social and economic, which are enumerated in Chapter I. The heaviest migration was from the "black belt" counties. In the bulletin on "Negro Migration in 1916-17," published by the United States Department of Labor, the statement is made that, "It is from these counties that Negroes have gone literally by the thousands. Some of them have lost 25 per cent or more of their total Negro population within the past 18 months."²

Both the white and the colored population of Alabama is largely rural, the percentage being 82.6 for the white and 82.8 for the Negroes. While it is probable that the Negro population is less rural in character than it was in 1910, due to the migration referred to above, the problem of educating the Negroes in Alabama is certainly a rural rather than an urban problem.

Public-school facilities.—Table 25 presents some salient facts concerning the public-school facilities for Negroes.

TABLE 25.—Public school statistics.¹

	White.	Negro.
Children 7 to 21 years of age in 1918.....	454,478	315,327
Teachers' salaries in public schools in 1918.....	\$3,682,314	\$474,749
Teachers' salaries per child 7 to 21.....	\$8.10	\$1.51
Number of illiterates 10 to 20 years of age.....	23,451	64,746
Per cent illiterates 10 to 20 years of age.....	7.0	20.6
Number of teachers.....	9,060	2,716
Enrollment.....	375,824	190,250
Pupils enrolled per teacher.....	41.5	70

¹ Figures are taken from the 1918 report of the department of education.

The public-school teachers of Alabama received \$4,157,063 in the school year ending September 30, 1918. Of this sum, \$3,682,314 was for the teachers of 454,478 white children and \$474,749 for the teachers of 315,327 colored children. On a per capita basis this is \$8.10 for each white child of school age and \$1.51 for each colored child.²

¹ This statement is taken from Bulletin of the Bureau of Education, 1918, No. 39, p. 27. The figures are those of the census of 1910.

² P. 56.

³ These averages were computed by dividing the appropriation for teachers' salaries in public schools by the number of children 7 to 21 years of age enumerated by the State biennial census in 1918. The salaries were obtained from the report of the State department of education, 1918, p. 166, and the school population from p. 155. City systems are included.

It is shown in the Alabama chapter of the publication "Negro Education," bulletin of the United States Bureau of Education, 1916, No. 39, that "The inequalities are greatest in the counties with the largest proportion of Negroes. The per capita sums decrease for white and increase for colored children with considerable regularity as the proportion of Negroes becomes smaller." The statement is also made that "The high per capita cost for white children in the 'black belt' counties is partly explained by the fact that they are few in number and widely scattered. The smaller cost of schools for colored children is partly due to the lower wage scale of colored teachers and partly to the very limited provision for high-school education. It is apparent, however, that these explanations by no means account for the wide divergencies in the 'black belt' counties."

In addition to the \$3,682,314 appropriated for the public-school teachers of white children, the State appropriated \$346,345 to maintain 42 county high schools, 9 district agricultural schools, 6 normal schools, and 3 institutions of higher learning. To the \$474,749 for the public-school teachers of colored children the State added \$16,000 to maintain one normal school, \$4,000 for the agricultural and mechanical school, largely maintained by Federal funds, and \$4,000 for Tuskegee Institute, a total of \$24,000.

The large variations in the per capita expenditures on white and colored children in the several counties of Alabama are due to a large extent to the fact that the State school fund for public elementary schools is apportioned to the counties on the basis of the total number of children of school age, regardless of race, but the "apportionment" of the county's share of the fund in the county is left to the county board of education. The division of the fund between white and colored schools is, therefore, a matter wholly in the discretion of the county board. The black-belt counties draw very large sums from the State, in proportion to the number of white children in these counties, while other counties, which have comparatively small Negro populations, receive apportionments almost directly proportional to the number of white children of school age. The county boards use their authority in such a way that there are great discrepancies in some of the counties between the amounts spent on the white and colored children. There are also great discrepancies between the amounts on white children in the various counties. Table 26 shows the per capita expenditures for white and colored children in counties located in the various sections of the State.

TABLE 26.—*Per capita expenditures for white and colored children.*

Sections and counties.	Per capita expenditure.	
	White.	Negro.
The black belt:		
Bullock	\$20.69	\$2.48
Montgomery	15.00	1.46
Dallas	17.35	.90
The mountain section:		
Cleburne	3.68	2.56
Jackson	3.20	1.22
Blount	3.93	3.03
The Tennessee Valley:		
Colbert	6.44	2.11
Madison	7.23	1.86
Lauderdale	5.26	1.12
The hill section:		
Tallapoosa	7.11	1.51
Bibb	7.49	2.47
Tuscaloosa	7.71	2.48
The wire grass or piney woods section:		
Covington	6.72	2.14
Escambia	7.70	1.37
Dale	6.15	.90

Local tax has been levied in a number of counties, and this has enabled the "white" counties to increase their school fund and lessen the disparity between the "white" counties and the "black belt" counties, as far as the expenditure on white children is concerned. The division of local tax funds within a county is a matter of interest to that county only, but when a county receives funds from the State for the education of Negro children, and uses that money for the education of white children, the matter is one of State interest. Of the total amount disbursed during the school year ending September, 1918, for teachers' salaries, 89 per cent was paid to white teachers. Obviously, however, there is a large variation in the per capita expenditures on white children in the several counties. In other words, while most of the money is spent on white schools, there is little uniformity in the spending of it in the counties.

One of the stock explanations of the poor school facilities for Negro children, especially in the black belt counties, is that the "Negroes do not pay any taxes," and hence the county can not afford, as a matter of justice to the white people, to spend more than a small fraction of the school fund on Negro schools. Some of the counties that show the largest expenditures for white children and the smallest for colored would be placed in a bad situation if their own argument were applied to them by the State. This is very clearly shown by Table 27, which sets forth the amount by which the money received from the State treasury for school purposes exceeds that paid in, for 10 black-belt counties. These 10 counties are among the first 19 of those receiving from the State the greatest excess from the State

treasury over the amount paid in. The figure following the county denotes its standing in this respect.

TABLE 27.—*Excess received from State treasury over amount paid in, for 10 black-belt counties.*

County.	Rank.	Excess received.	County.	Rank.	Excess received.
Bullock.....	1	\$20,926	Butler.....	8	\$18,871
Wilcox.....	2	19,326	Barbour.....	9	18,544
Pickens.....	4	19,589	Hale.....	10	18,978
Chambers.....	5	19,067	Clarke.....	11	18,014
Perry.....	6	19,064	Monroe.....	12	17,019

The per capita expenditures for white children in these counties is high as compared with most of the other counties in the State outside the black belt. The map also shows that the per capita expenditures for white children are large in the counties named in the table, as compared with the per capita expenditures for colored children in those counties. It might be added that six of the eight counties in the State which had not levied the 3-mill local tax when the 1918 report of the department of education was issued are black belt counties, and two of them are included in the above table.

According to the census of 1910 the total number of Negro illiterate males of voting age was 92,744, forming 43.4 per cent of the total. The white illiterates of the same age group were 30,633 in number, or 10.6 per cent of the total. For several years the Alabama Illiteracy Commission has been working to banish illiteracy from the State. Due to lack of funds, the commission has not been able to do more than make a beginning in the work for colored people. The number of illiterates 10 to 20 years of age, inclusive, was published in the report of the department of education in 1918. The figures on illiteracy in the same age group were published by the census in 1910, and these figures may be compared with the State figures. The census did not report the illiteracy figures by races, in the case of persons 10 to 20 years of age, inclusive. According to the 1910 census there were 526,505 persons 10 to 20 years of age in Alabama, of whom 86,437, or 16.4 per cent, were illiterate. According to the 1918 report of the department of education, the total number of persons 10 to 20 years of age was 561,291, of whom 88,197 were illiterate. The percentage of illiteracy was 15.7. The decrease in illiteracy was, therefore, only 0.7 per cent. At the present time the public school facilities for Negroes in Alabama are so inadequate that no great reduction in Negro illiteracy can be expected in the near future. But substantial progress is being made, as a result of increased interest on the part of county boards and superintendents, money raised by patrons to increase teachers' salaries and lengthen terms, and by Jeanes industrial supervisors, and

the building of county training schools and Rosenwald schools. The factors making the fight against illiteracy a difficult one are short terms, the lack of good schoolhouses and equipment, and failure to enforce the compulsory education law against Negroes in some counties.

Schoolhouses and grounds.—Less than half of the buildings in which Negro children are taught are owned by the public. According to the 1918 report of the State superintendent, the ownership of the Negro school buildings is as follows:

TABLE 28.—Ownership of Negro schoolhouses.

	State.	County.	District.	Privately owned.	Cities.
Rural.....	151	65	598	1,040	33
City.....				5	33
State.....	151	65	598	1,045	66

Of the 1,854 rural schools, 1,040, or 65.1 per cent, are privately owned. Of the 4,584 white rural schools, 3,568, or 77.8 per cent, are owned by the State, the county, or the district.

The fact that such a large percentage of Negro school buildings are privately owned explains in part the poor condition of many buildings and their unsuitableness for school purposes. While not all the privately owned buildings are churches and lodge halls, it is quite a common thing to find a Negro school taught in a church. For instance, in Montgomery County 33 of the 69 rural schools are taught in schoolhouses, and 36 are taught in churches. In Dallas County half of the Negro schools are taught in churches. Efficient work can not be done in a school housed in a church or lodge hall. In the case of the church school, the seating is very unsatisfactory, as the church benches are used, and the children have no desks to work on. As in the case of the lodge hall, the lighting is unsatisfactory, as the windows are not properly placed for school purposes. In church and lodge hall schools the blackboard facilities leave much to be desired. Often no blackboard whatever is provided. The blackboard in the church school generally consists of several strips of painted wood fastened to two uprights and leaned against the wall. A number of lodge hall schools visited were equipped with patent or home-made desks, but the teachers reported that after lodge meetings it was usually necessary to rearrange the furniture and clean up the room.

The Negro schoolhouses, even when owned by the public authorities, are often without proper seating facilities. Public-owned schoolhouses were found with crude benches used as seats, even poorer than

the pews used in many church schools. The State superintendent reports that out of 1,859 rural schools for Negroes, only 229 have patent desks. Of the 4,584 white schools, 2,790, or 60.9 per cent., are equipped with patent desks. The corresponding figure for the Negro schools is 12.3 per cent.

Very few rural schools for Negroes, with the exception of the Rosenwald schools, are properly lighted. In most of the schools visited the lighting was from both sides, and in many schools the position of one window was such as to throw the light directly into the eyes of the pupils. The prevailing style of building used exclusively for school purposes is the "box-car" type, with the door in one end, two or three windows on each side, and one or two windows in the other end toward which the pupils face. This type of school building is often found on the grounds of a church. The Negroes have built these schools in recognition of the fact that a church is not suitable for a schoolhouse. As the buildings were erected on private grounds, State aid was not secured, and the buildings were not erected in accordance with any approved plan. This statement also applies to those buildings erected as a combination lodge hall and school, with the schoolroom on the first floor. The practice of building schools of this type has been practically discontinued. The Negroes are now anxious to secure aid from the State and the Rosenwald Fund, and in order to secure such aid, the building must be erected on a plat of at least 2 acres owned by the public authorities and the building must be built in accordance with a plan approved by the State department or by Tuskegee Institute.

The school grounds are almost universally too small. Practically all the schools visited had grounds of 2 acres or less, except in the case of two-teacher schools built with State aid, which, according to law, must be built on a plat of 3 acres or more. The schools on church grounds have one advantage—the playground is generally ample in size, though not always level enough to be used as a playground. Very few schools used their grounds for gardening or agricultural experiments, but this is due in part to the shortness of the term. Playground apparatus of any kind was lacking in the rural schools visited, except in the case of some Jefferson County schools aided by corporations. The most common source of water supply is a well on the premises of a family living near the school. The schools taught in churches or in buildings on church grounds are the schools that generally have a well on the grounds. However, these wells are not used regularly during a large part of the year, and where they are surface wells, as in the case in Bullock County, the wisdom of using them for school purposes is questionable. Springs are not an unusual source of water supply for the schools. In nearly every school visited where a spring was used, it was not on the grounds.

While the spring is often inconveniently located, it is a safer source of water supply than the well on school grounds, judging by the schools visited.

In most of the schools visited the water was kept in open buckets. The drinking fountain was found in very few schools, usually in Rosenwald schools, but its use is on the increase. In Colbert County the county superintendent's insistence on the use of coolers in the schools has resulted in closed receptacles being provided in all the schools visited. The colored teachers deserve to be commended for their persistence in seeing that the pupils use individual cups. The extent to which individual cups are used in the Negro schools is surprising. The teachers have insisted on the use of the collapsible aluminum cup, but when these have not been secured or are left at home, the use of paper cups is required. Several schools were found where all the children had drinking cups which were kept at the school—all on a shelf provided for the purpose. On account of the great variety of glasses and cups, it was easy for each child to distinguish his own.

The heater found in nearly every school visited was the unjacketed stove. Outside of Jefferson County the jacketed stove was not found except in some of the Rosenwald schools. Wood is used as fuel far more than coal, outside of the counties where coal is at hand. The common manner of keeping the wood is to pile it in one corner of the schoolhouse.

The average colored rural school is sadly deficient in toilet facilities. Many outhouses were found in such a dilapidated condition that they could hardly be called toilets. When there is only one outhouse, as was the case at a fourth of the schools visited, the boys are expected to "use the woods." All the schools visited in Colbert County were equipped with two outhouses, as a result of the superintendent's refusal to recognize any school not so equipped. The Rosenwald schools are all supplied with two modern toilets.

It is only fair to say that most of the teachers whose schools were visited, especially those teaching in Rosenwald schools and in buildings built for school purposes, were making an honest effort to keep the building clean. Often this effort is made under very adverse conditions. The teacher usually sweeps the building out after school, or has some of the children do it under her direction. The monitor system is the one generally used. It is also customary to have several pupils sweep the schoolhouse out during the noon recess. The sprinkling process is not employed as regularly as could be wished, in connection with the daily sweeping. According to the teachers' statements, the floors are scrubbed at least once a term, and sometimes twice a month. The condition of the floors bore out the truth of their statements.

The Rosenwald schools.—The Rosenwald schools furnish a striking illustration of what can be accomplished by the cooperation of private philanthropy, public school funds, and the Negroes themselves. Mr. Julius Rosenwald, of Chicago, aids Negro communities in building rural schools. The funds are administered by the extension department of Tuskegee Institute. The amount given is limited to \$400 for a one-teacher school and \$500 for a two-teacher school. An equal or greater amount must be secured from the public authorities or raised by the school patrons. In many instances the Negroes have secured aid from both the State and the Rosenwald Fund in building a school.

To secure Rosenwald aid, the school must have at least a five months' term. No help can be secured from the Rosenwald Fund until the total amount raised, including the Rosenwald money, is sufficient to complete and furnish the schoolhouse, but land, labor, and material may be included in estimating the amount raised by the community. The plans for the building must be approved by Tuskegee Institute, and where State aid is secured, by the State department of education. The building must be completed within six months after the Rosenwald aid is secured.

Jeanes industrial supervisors, county agricultural agents, and teachers have been most successful in raising funds. The colored people deserve the highest commendation for the liberal way in which they have donated money for schoolhouses. The Rosenwald Fund has an agent who travels over the State, promoting the building of modern schoolhouses.

School consolidation has been promoted by reason of the fact that two communities, by combining their schools, can get \$800 for the consolidated school if they raise a like amount. Terms have also been lengthened and teachers' salaries increased. The Rosenwald Fund aids communities that have erected new schools in this way: In the case of a one-teacher school with a five months' term, the Rosenwald Fund offers \$30 if the patrons raise a like amount, in order that the school may have a seven-months' term. The term of a two-teacher school is increased one month by the same plan. Where the school already has a seven months' term, the money from the patrons and the Rosenwald Fund is used to increase the teacher's salary.

The Rosenwald schoolhouses are carefully planned to meet the needs of a rural school. In the case of a one-teacher school, the building is provided with a room for industrial work, cloak rooms, and a closet for storing supplies. The two-teacher schoolhouses usually have rooms for kitchen and shop, and a small library. The buildings are properly lighted and equipped with patent desks and good blackboards. Each school has two sanitary toilets.

To aid in the building of 191 schoolhouses in Alabama, Mr. Rosenwald has given \$64,250; the public funds invested in these schools amount to \$49,741; the Negroes have contributed \$101,460, and white people \$8,645. Schools have been built in 24 counties. The counties in which the largest number of schools have been built are Russell and Macon, 15 each; Lee, 14; Lowndes, 13; Chambers, 11; Conecuh and Hale, 10 each.

School enrollment and attendance.—The following tables compare enrollment and attendance for the white and colored schools:

TABLE 29.—Population and enrollment.

Population 7 to 21 years of age:		
White.....	454,478	
Negro.....	315,327	
Enrolled:		
White.....	375,824	
Negro.....	190,250	
Per cent enrolled:		
White.....	83	
Negro.....	60	

TABLE 30.—Enrollment and attendance.

Class.	Enrolled.		Average attendance.		Per cent of attendance.			
	White.	Negro.	White.	Negro.	Of enrolled.		Of population.	
					White.	Negro.	White.	Negro.
Rural.....	317,436	161,881	102,608	55,346	60.7	52.7		
City.....	58,388	28,399	42,785	17,060	73.3	80.1		
State.....	375,824	190,280	235,393	102,398	62.6	53.8	61.8	52.6

In his annual report for 1918, the State superintendent points out that the increase in enrollment for 1917-18 over the preceding year was 27,597 in the case of the white schools, due to the enrollment of 26,225 new pupils in the elementary schools and 1,372 new pupils in the high schools. In discussing the Negro enrollment, he says:

The enrollment of Negro children for 1917-18 was 190,250, an increase of 33,521. This increase is accounted for by the fact that 33,474 new pupils entered the elementary schools during the year, while the high-school grades sustained a net gain of 47. The percentage of the Negro school population enrolled was approximately 60, as compared with 47 for the preceding year. This increase is one of the most remarkable facts recorded in this report.

From these figures, it is apparent that while the actual number of new children in the Negro schools exceeded that of the white, the increase in the case of high-school pupils is negligible, as compared with the corresponding figure for the whites.

After making due allowance for the number of children of school age who are in school, but not included in the above figures, the State superintendent concludes that at least 12 per cent of the white and

25 per cent of the Negro school population were not in school for a day during the year. He attributes the relatively large increase in enrollment to the compulsory attendance law which became effective October 1, 1917.

The figures for increase in average attendance are striking when compared with those for enrollment. The increase in white attendance was 15,359 over the preceding year, an increase of 7 per cent. The increase in the case of the Negroes was only 5,014, or 5 per cent over the preceding year. Due to war conditions there was an actual decrease in the average attendance of Negro high-school pupils. While the increase in enrollment for the Negroes exceeded that of the white by 5,924, the increase in average attendance for the whites exceeded that of the Negroes by 10,345.

What are the causes of poor attendance in Negro schools? One important cause is the fact that Negro children are kept out of school by their parents to help on the farms. Even when the school term is only five months, as in the case of Montgomery County, which has a school term of 100 days for colored schools, many of the children enter late and many are taken out of school as soon as the spring planting begins. In counties with a five months' term the term generally ends the middle of April. There are, however, a number of other causes of poor attendance. It has already been shown in the discussion of school buildings and grounds that too often the school is not an attractive place. If the school is taught in a church or lodge hall the absence of blackboard facilities and suitable desks interferes seriously with the work of the pupils, to say nothing of the poor lighting and other objectionable features. Even when the school is taught in a building erected for school purposes, properly lighted, and equipped with modern desks and blackboards, the lack of globes, charts, maps, library books, and other equipment lessens the efficiency of the teacher's work. The result of this lack of equipment is that the so-called teaching process too often becomes a mere "hearing of lessons," the pupils reading from the book and reciting what they have memorized from it.

Another cause of irregular attendance that might be mentioned is the small attention given the individual child, due to there being too many pupils to the teacher.

TABLE 31.—Number of pupils to the teacher in the rural districts and cities, for both races.

Classes.	Enrolled.		Teachers.		Pupils per teacher.	
	White.	Negro.	White.	Negro.	White.	Negro.
Rural	217,426	161,861	7,863	2,271	43	71.3
City	88,868	28,598	1,422	445	39.2	63.8
State	276,294	190,459	9,085	2,716	41.5	70

In most of the Negro schools there are entirely too many pupils to the teacher. The result is that the average pupil gets scant attention, and his interest in school work lags accordingly. Sometimes the parents or public authorities employ an assistant teacher during the months when the attendance is best. Whereas the State has 2,716 teachers, the rural school agent in charge of Negro schools for the department of education estimates in his 1918 report that 8,000 teachers would be needed to properly handle the elementary pupils if all attended regularly.¹ This estimate seems excessive, but assuming that three-fifths of the Negroes of school age are of elementary grade, 4,729 teachers are needed on the basis of 1 teacher to 40 pupils. The number of pupils enrolled per teacher varies greatly in the counties. Table 32 shows how great this variation is, for nine counties.

TABLE 32.—Colored pupils per teacher in certain counties.

Counties.	Colored pupils enrolled.	Colored teachers.	Pupils per teacher.
Autauga.....	1,677	34	49.3
Bullock.....	4,150	45	92.2
Coffee.....	1,137	27	42.1
Conecuh.....	2,035	41	71.6
Madison.....	3,919	61	64.2
Marengo.....	3,353	49	68.4
Montgomery.....	9,970	142	70.2
Shelby.....	1,354	29	46.7
Walker.....	1,740	38	45.8

Another cause of irregular attendance is poor teaching. It is impossible to secure well-trained teachers with forceful personalities for the salaries that are paid. The saying that "the teacher makes the school" applies with as much force to the colored school as it does to the white school. In order to teach Negro children effectively, the subject matter should be presented in a concrete way, so that the child can visualize the ideas in the lesson. A poorly trained teacher will not use such methods in the classroom. The work in the classroom is not now related to the child's daily life as it should be, and hence not adapted to his needs. More emphasis should be put on handwork and the application of the knowledge gained.

The responsibility for poor attendance, however, does not rest entirely with the public school authorities. The parents do not seem to realize the importance of regular attendance. Even in cities, where the parents do not rely on the children's help as they do in the country, the attendance is far from being what it should be. As might be expected, however, the attendance is better in cities than in the rural districts.

The teachers could improve the appearance of the school buildings and grounds by putting forth a little effort in the right direction.

¹ Report of Department of Education, 1918, p. 101.

It would certainly seem that the teachers could at least secure attractive pictures for the schoolroom. At a number of the schools visited the teacher had secured the help of the patrons and cleared off the school grounds, provided window shades, and made other improvements.

The following table shows just what the actual attendance was at 20 rural schools in Montgomery County.

TABLE 33.—Attendance of Negro children in 20 schools, Montgomery County.

Attended:	Number of children.	Attended:	Number of children.
1-10 days.....	50	61-65 days.....	97
11-15 days.....	28	66-70 days.....	72
16-20 days.....	32	71-75 days.....	48
21-25 days.....	18	76-80 days.....	138
26-30 days.....	50	81-85 days.....	140
31-35 days.....	56	86-90 days.....	106
36-40 days.....	66	91-95 days.....	121
41-45 days.....	54	96-100 days.....	111
46-50 days.....	57		
51-55 days.....	58	Total.....	1,413
56-60 days.....	111		

Of Negro children enrolled 41 per cent attended less than 60 days.

As a result of irregular attendance and other factors closely related to it, Negro children leave school before getting very far in the grades. The following tables for rural schools and for places of less than 2,000 inhabitants show this condition. These figures were gathered by means of a questionnaire mailed to the teachers.

TABLE 34.—Distribution, by grades, of Negro pupils.

Grade.	Rural schools.		Towns with less than 2,000 inhabitants.	
	Number of children in the grade.	Per cent of total.	Number in the grade.	Per cent of total.
1.....	19,465	42.2	6,762	37.6
2.....	8,697	18.9	2,899	16.1
3.....	6,414	13.9	2,356	13.1
4.....	5,485	11.9	2,163	12.0
5.....	3,305	7.2	1,660	8.7
6.....	1,710	3.7	1,167	6.5
7.....	600	1.3	674	3.7
8.....	412	.9	434	2.4
Total.....	46,079	100.0	18,015	100.0

Teachers and county supervision.—A large number of the public-school teachers of Alabama received their training in private institutions. Can the public and private institutions combined meet the demand? In this connection the following paragraphs from Bulletin 89, 1916, United States Bureau of Education, are illuminating. The statements are based on a thorough study of the private schools for Negroes in Alabama.

Private financial aid.—The deficiencies in public expenditures for the education of the colored people largely explain the active campaigns for private schools since the Civil War. As a result of this activity, the private schools have a property valuation of \$5,457,375, and annual income of \$554,556, and an attendance of 12,819 pupils, of whom over five-sixths are in elementary grades. It is sometimes thought that the liberal private contributions to these schools make up for the inequalities in the public appropriations for the education of white and colored youth. The total sum appropriated for teachers' salaries in colored public schools in Alabama, however, together with the income of all colored private schools, aggregate \$926,733, or about a million and a half dollars less than the expenditure for teachers' salaries in white public schools alone. In addition, there are 50 white private schools which report to the State superintendent of education. The aggregate expenditure of these schools is practically equal to the expenditure for colored private schools.

Teacher training.—The most urgent need of the colored schools in Alabama is trained teachers. The supply now depends almost entirely upon the secondary schools, most of which are private institutions. Of these only seven offer fairly adequate courses in teacher training. Eleven others include one or two teacher-training subjects in their general course. To supplement these facilities, an effort has been made to develop county training schools. Through the cooperation of the Slater Fund and the General Education Board with the State department of education, four of these schools are now maintained. As yet, however, their work is almost entirely of elementary character. They are county centers at which some secondary and industrial training may be supplied to those who plan to teach in the rural schools. The pupils in the graduating classes of all the schools offering teacher-training subjects in 1915 numbered only 270, an annual output obviously inadequate to meet the need for teachers in a State with over 900,000 colored people and 2,350 colored public-school teachers, of whom 70 per cent are holding only third-grade certificates.

In the discussion of certification in Chapter XVIII it is shown that 70 per cent of the Negro teachers hold third-grade licenses. The white teachers are much better prepared for their work than the colored teachers, if the grade of license is taken as a basis of comparison. Several years ago a law was passed giving life certificates to all teachers who had held first-grade certificates for a certain time. Most of the colored teachers with first-grade certificates thereby secured life certificates, and since that time few colored teachers have qualified for first-grade certificates. This explains why there are more colored teachers holding life certificates than there are holding first-grade certificates.

TABLE 85.—Salaries of white and colored teachers compared in cities and rural districts.

Districts.	Total amount of teachers' salaries.		Number of teachers.		Average salary.	
	White.	Colored.	White.	Colored.	White.	Colored.
Rural.....	\$2,618,167	\$371,109	7,563	2,971	346.2	124.8
City.....	1,024,147	183,640	1,498	445	715.3	413.5
State.....	3,642,314	554,749	9,061	3,416	403.9	176.3

From this table it is apparent that the average salary paid the Negro rural teacher is too small to attract competent workers to that field. While the average salary of the city teacher is not large, it is more than twice that of the rural teacher. There can be no doubt that some of the money now spent on Negro schools is wasted, as far as educational results are concerned. The teacher that can be employed for \$25 or \$35 a month, for a term of from three to five months, is often not worth the salary paid. Obviously she must follow some other vocation for most of the year, in order to make a living. Where the teacher lives in the community, her salary is relatively larger by reason of the fact that she does not have to pay board. The board paid by teachers ranges from \$8 to \$15, and salaries have not begun to keep pace with the cost of board. In a number of counties it is customary for the patrons to pay the teacher's board, or part of it, as well as to "supplement" her salary so as to add a month to the public school term.

Five years ago the salaries paid to Negro teachers were much larger, relatively, than they are now. There are two reasons for this. The first is the rapid rise in the cost of living that has taken place. The second is the greatly increased economic opportunity that has come to the Negro. Five years ago the vocations open to Negroes were very limited, and most of them were the less desirable vocations, demanding long hours and disagreeable work for small pay. As a result of this condition, the positions in the public schools were very much sought after, and the best class of Negroes was found in the teaching profession. But to-day conditions are different. Vocations formerly closed to Negroes are now open, while in those which have always been open, the wage scale is much higher. The positions in the schools are, therefore, far less desirable now than formerly, as compared with other positions open to colored people. The Negro is no longer a stranger in northern industry. And the number of so-called "race enterprises" has greatly increased.

The result of this is that to-day a large percentage of the competent Negro men and women remain in the profession because of their interest in education and in their race. This is brought out in the questionnaires returned by the colored teachers. One question asked was: Do you expect to remain in the profession permanently? Why? Some of the replies are as follows:

"Because I like the work and I feel that I can be a help to my people"; "Love for humanity"; "I feel that I can help those less fortunate"; "I feel that my race needs all the help I can give"; "There is no better way than this to eliminate illiteracy and to help the race"; "Because I think I am able to help our race"; "To promote the general interest and welfare of the race"; "To help build

up the race"; "To help boys and girls to live"; "Because I feel that I can help elevate humanity."

One factor which lessens the efficiency of the colored teachers is the lack of supervision. The counties in Alabama are large, and most of them have so many white rural schools that often the county superintendent has all that he can do to supervise the white schools. There is no doubt, however, that the Negro schools are receiving more supervision than ever before. Most of the county superintendents who have come into office under the 1915 county board law are interested in the education of all the people, and it is only the pressure of other demands that prevents them from giving more attention to the colored schools.

The 1918 report of the department of education showed that 4,117 visits to rural colored schools were made by the county superintendents and their assistants. Of the total number of visits made, 1,759 were in Jefferson County, 162 in Macon County, and 673 in Montgomery County, leaving only 1,523 for all the remaining 64 counties of the State. The showing for the State, as a whole, is largely due to the effective work of the industrial supervisors in 25 counties, maintained by the counties in cooperation with the Jeanes Fund, each paying about half of the worker's salary. The number of visits reported in the 1917 State report was 1,794, so that the increase for one year was 2,323, which shows remarkable progress in school supervision. The colored schools need all the supervision they can get, as many of the teachers have never had an opportunity to observe effective teaching, and 70 per cent of them are not well prepared for their work, judging by the grade of license held. Colored teachers are most responsive to supervision and very willing to carry out orders and act on suggestions.

As stated above, the supervision of colored schools is most effective in Jefferson, Montgomery, and Macon Counties. In Jefferson County two colored supervisors are employed, and the white supervising principals give the Negro schools the same attention that they do the white schools. In Montgomery County three colored supervisors are maintained with the help of the Jeanes Fund, and the General Education Board. The three colored supervisors in Macon County are financed by the county, the Jeanes Fund, and Tuskegee Institute.

For further information on the preparation of teachers the reader is referred to the chapter on that subject.

County training schools.—There are 11 of these institutions in Alabama. They are maintained by the county boards of education, with the aid of the Slater Fund. The conditions on which the Slater Fund aids the county school are as follows:

1. That the school property shall belong to the State or county, thus fixing the school as a part of the public school system.

2. That there shall be an appropriation of at least \$750 from the public funds for maintenance.

3. That the teaching shall be carried strictly and honestly through the eighth grade, including industrial work, and in the last year, some training, however elementary, for the work of teaching.

On these conditions the Slater fund appropriates \$500 yearly for maintenance, and aids in supplying new buildings or making repairs the first year, when funds for the same purpose are provided from other sources.

Seventy-seven such schools are now in operation in as many counties in the South, and schoolmen are agreed that this type of school has come nearer than any other to meeting the needs of the rural Negroes. The purpose for which these schools were created was the training of teachers for a people 80 per cent rural. The idea was to supply the country schools with teachers who had been brought up in the country and who understood and sympathized with country life. A large percentage of the teachers from private schools are city bred, and before the development of the county training schools all the public institutions of secondary grade, except the State institutions, were located in cities. The city-bred teachers from the city high schools can hardly be expected to cope with the problems of the rural Negro. They may be good teachers, but only in exceptional cases have they been community leaders. In view of these facts, educators interested in the welfare of the Negro saw the necessity of training teachers in their own counties, thereby making it unnecessary for them to spend several years in a city in order to teach.

In Alabama the pupils in the county training schools are nearly all of elementary grade. During the school year 1917-18, 114 pupils of secondary grade were enrolled in the training schools. It is probable that this number would have been twice or three times as large had it not been for war conditions. It is too much to expect, however, that these schools should become county normal schools within the first four years of their existence.

The work of the county training schools has been conspicuous for two things—the thoroughness of the classroom work and the emphasis put on industrial work. The schools serve as a model for the county, and are an ever-present source of inspiration to the rural teachers. County institutes are generally held at the training school in the summer. All the counties with training schools have Jeanes industrial supervisors, and some have colored farm demonstrators. These workers usually make the school their headquarters. A teacher of vocational agriculture is maintained at each school without expense to the county, by cooperation of the State and Federal governments, under the Smith-Hughes Act.

These schools illustrate in a very striking way what can be accomplished by the cooperation of public authorities, northern philanthropy, the Negroes, and white people interested in developing schools adapted to the Negro's needs. The last report of the State department of education, referring to these schools, says that "Local white people have donated money, lumber, and land toward their erection." The Negroes themselves have given liberally for buildings, equipment, and maintenance.

The Lowndes County Training School is probably a typical training school in Alabama. It has 7 acres of land, 5 of which are used for garden and experimental plots, and the remaining 2 for playground. There are 3 buildings—the school building, teachers' home, and shop. The value of the buildings and equipment is \$4,150. Much of the labor used in building the school was donated by the patrons, with a resultant saving in the initial cost. The buildings and equipment represent investment by the county board, the general education board, the Slater Fund, local white people, and Negroes. The school has five teachers, two men and three women. One man is principal and the other has charge of the shopwork and vocational agriculture. The class work is effective, and the work in the shop and garden is of immediate value to the pupils and their parents, and to the whole county. The girls are taught cooking and sewing. The pupils are drawn from a very large area, but the school will not be a real county institution until a dormitory is provided. The Negroes are now raising money to build one. The effect of the school on the community has been to make the people do more intelligent farming and improve their homes. White people hitherto indifferent to education for the Negro have become interested as a result of inspecting the school. The value of such an institution to both races is apparent to anyone who sees the work that is actually being done.

Jeanes industrial supervisors.—Reference has already been made to the supervising teachers whose work is made possible by the cooperation of the county boards and the Jeanes Fund. There are 31 of these teachers, working in 25 counties. The following quotation from Bulletin 38 (p. 165), 1916, United States Bureau of Education, is a concise description of the work done by these teachers:

These are usually young colored women who visit the public schools of the counties for the purpose of aiding and encouraging the schools in all phases of their work. The more important service of these traveling teachers, working under the direction of the county superintendent, is to introduce into the small country schools simple home industries; to give talks and lessons on sanitation, personal cleanliness, etc.; to encourage the improvement of schoolhouses and school grounds; and to conduct gardening clubs and other kinds of clubs for the betterment of the school and the neighborhood.

The teachers are appointed by the county superintendent and their work is supervised by that officer. Effort is made by the representatives of the Jeanes Fund to have the county authorities and the colored people undertake as much as possible of the salary and expenses of these teachers.

According to the last published report of the Jeanes Foundation, made when there were only 24 Jeanes teachers in Alabama, the fund paid the teachers \$5,223, and the public-school authorities, \$3,805.

These "walking teachers," as the Negroes call them, were originally put in the field in order to vitalize the school work by relating it to the everyday life of the child. How well they have succeeded is attested by the superintendent of public instruction for Virginia, in his annual report for 1916-17. The Jeanes workers have been in Virginia longer than in any other State, and the value of their work is very evident there. The superintendent says:

COLORED SUPERVISORS AND THE LESSON THEY TEACH.

Some of life's best lessons are taught by the simplest and most obvious illustrations, as in the case of the sluggard who was advised to observe the unrecognized ant; and so we may say that if any man will observe work of the colored demonstrators, or supervising teachers—men and women whose services have been almost thrust upon the State by private generosity—he can not hesitate for a moment in deciding what is the next step in the development of our work among the white children. These colored leaders have increased teachers' salaries; they have also lengthened the term and have brought into the schools so many new children that the taxpayer has found the cost per capita materially reduced.

The work of the Jeanes teachers is made more effective by the co-operation of the General Education Board, which pays the salaries of the teachers in the summer, thereby making them all-year workers. After the schools are out the Jeanes teachers form Home-Makers Clubs and give demonstrations of canning, preserving, cooking, and proper care of the home. The figures for 1917, from the report of the Alabama department of education, give a fair idea of the extent of this work:

Number of clubs organized.....	582
Number of girls enrolled.....	6,774
Number of mothers enrolled.....	6,915
Total membership.....	13,689
Number of public demonstrations in canning.....	937
Number of homes visited.....	5,290
Number of quarts of fruits and vegetables saved for home use.....	461,787

The work of the Jeanes teachers is supervised by the county superintendents, and the funds with which they are paid are handled through the county superintendent's office.

Table 36 shows in detail the manner in which the Jeanes industrial supervisors are financed in the several counties, and the extent of their supervision and money raising.

TABLE 38.—Work of Jeanes industrial teachers in Alabama in 1917-18.¹

Counties.	Jeanes fund.	County fund.	Schools visited.	Total number of visits.	Amount of money raised.
Autauga ²	\$150.00	\$150.00			
Baldwin	180.00	120.00	20	107	\$829
Bullock ²	150.00	150.00			
Calhoun ²	180.00	90.00			
Colbert ²	175.00	122.50	21	45	966
Chambers	150.00	150.00	41	80	1,100
Conecuh	150.00	150.00	36	131	700
Coosa	240.00		19	48	848
Coffee	175.00	175.00	25	111	1,454
Dallas	150.00	150.00	44	80	872
Greene ²	180.00	105.00			
Henry	192.50	122.50	24	120	580
Houston	180.00	105.00	18	108	889
Jefferson	270.00	270.00	46	127	966
Lowndes	350.00		28	62	814
Lee	240.00		25	50	215
Macon	350.00		42	126	1,691
Madison	150.00	150.00	29	182	1,608
Mobile	200.00	200.00	37	37	3,035
Monroe	227.50	105.00	38	173	487
Montgomery ²	240.00	240.00	46	180	1,200
Perry	195.00	105.00			
Pickens	180.00	120.00	40	126	450
Randolph	150.00	150.00	46	147	2,329
Russell	175.00	175.00	30	210	3,466
Tallapoosa	245.00	105.00	47	248	4,563
Walker	140.00	210.00	44	153	2,082
			20	224	900

¹ This table was furnished by the rural school agent who supervises the colored schools.

² Report for this county incomplete.

State supervision of schools.—Through the cooperation of the General Education Board a rural school agent connected with the State department of education, and working under the direction of the state superintendent of education, gives his entire time to supervising the Negro public schools of the State. The rural school agent is a white man of extended experience in school work, and he organizes and directs the colored workers in such a way that efficient work is done in all parts of the State. There is also a Jeanes teacher who is a State worker, supervising the other industrial teachers. Her salary and traveling expenses are met in part by the General Education Board. The State department finances two colored institute conductors, whose work has been of great value. The Alabama illiteracy commission has one colored field agent. The Negroes have raised a large part of the money used to keep this agent at work.

Work of State institutions.—Much of the progress that has been made in Negro education in Alabama is due to the work of three schools: Tuskegee Institute, the Agricultural and Mechanical College at Normal, and the State Normal School at Montgomery. The State appropriates \$4,000 toward the maintenance of Tuskegee, a very small part of that institution's income, but enough to make the school a quasi-public institution. The Agricultural and Mechanical College at Normal receives most of its support from the Federal Government (\$22,100). It also receives a State appropriation of \$4,000. The Normal School at Montgomery receives a State appropriation of

\$16,000. The influence of the founders of these institutions did much to create sentiment favoring Negro education, and to improve race relations and bring about a better understanding between the races. William H. Councill founded the Agricultural and Mechanical College at Normal, and donated the plant to the State when the institution was given the Morrill Fund and became the land-grant college for Negroes in Alabama. William B. Patterson established at Marion the normal school, which was later moved to Montgomery. The institution built by Booker T. Washington at Tuskegee has had a powerful influence in molding sentiment favorable to Negro education. All these educational leaders believed that education should be adapted to the needs of the people, and the courses given at their respective institutions have been formulated in accordance with that belief. The work of these schools has also been influential in destroying prejudice against vocational education for white people.

At present the State Normal School at Montgomery is without dormitories, so that students who come from out of the city are forced to board with families in the city. The school authorities are unable to exercise any supervision over the students after school hours. Parents are often unwilling to send their boys and girls off to school under these conditions. The result is that a very large part of the enrollment is from the city of Montgomery, and the city school board has not seen the necessity of building a high school for Negro children, when the State institution served the purpose. The school has only 5 acres, and its work is hampered by this fact. Due to its location in the city of Montgomery, and the fact that a large part of its student body is from the city, the atmosphere is not favorable to the training of rural leaders. At present the vocational courses for boys, with the exception of gardening, are not effective, and some of them have been discontinued. While the institution is not a trade school, these courses should be required of men who are preparing to teach, so that they may be prepared to make their teaching of real value to their pupils. The school has a very large elementary enrollment. These children are charged tuition, and while they are taught without expense to the State, there is no necessity for having an elementary school larger than is needed for practice teaching. The classroom work in the secondary classes is thorough. Despite the handicaps of the school many efficient teachers have been sent out to serve the State.

The Agricultural and Mechanical College at Normal has been hampered by limited funds. The Morrill fund which it receives from the Federal Government can be used only for certain purposes. To insure the efficient use of the Federal appropriation the school should have from other sources an income at least equal to the Federal fund. The State appropriation of \$4,000 has not been increased

Since 1885, while the expenses of the school have increased until at present there is a debt of \$30,000 accumulated during the last 15 years. For many years the school had an unusually strong faculty, but the salaries paid are no longer adequate to command the best type of teacher. The school now spends more for coal than the State appropriates annually for maintenance. The institution is sadly lacking in dormitory facilities. Teachers' homes and an academic building are also very much needed. The State has never given the school a building, nor made any special appropriation. However, the school has secured several buildings through the generosity of friends, but on account of the limited income the building program was discontinued, as the addition of new buildings increased the cost of upkeep. At present a chapel is in use that was condemned several years ago.

The emphasis at Normal has been on teacher training, trades, and agriculture. The school has 2,266 graduates. The first four vocations represented, ranked according to the number of graduates in them, are: Housekeepers, 498; teachers, including principals, and supervisors, 480; farmers, 340; trades, 302. While the academic work has not been neglected, the work of the graduates shows that the purposes for which the school was founded have been kept in mind by the president and teachers.

The school has never interfered with the development of the public school in Huntsville. Its students have been drawn from all parts of the State, especially from the Tennessee Valley. It is evident, however, that if the school is to serve the State properly, either as a grade school, an agricultural school, or a normal school, it must be better supported by the State.

The work of Tuskegee Institute is so well known that it would seem unnecessary to give an extended account of it here. It should be borne in mind, however, that while Tuskegee receives an appropriation from the State equal to that of the Agricultural and Mechanical College and has done a magnificent work in the State, it is really an institution for South Carolina, Georgia, and the Gulf States, just as Hampton Institute is for the States farther north. In other words, its field is much larger than the State of Alabama. Nevertheless, Tuskegee is now regarded as the educational headquarters for the colored race in Alabama. Probably the most remarkable and far-reaching service rendered by Tuskegee has been its extension work. The following quotation from Bulletin 39, 1916, United States Bureau of Education, gives a brief account of Tuskegee's extension work:

The extension department provides a large number of activities for the improvement of the educational, agricultural, business, home, health, and religious life of the colored people of the United States. These activities vary from

those limited to the needs of the institute community to those of national significance. The local organizations include the building and loan association, home building society, women's clubs, health and religious organizations. In Tuskegee town a night school is maintained and other activities are carried on for the improvement of the colored people. County-wide movements include the supervision and building of rural schools, farms demonstration work, and health campaigns. The State-wide and national activities are largely the result of Dr. Washington's influence over the colored people and the esteem with which he was regarded by white people North and South. The most important of these are the National Business League, with its State and local organizations, and the State educational tours which Dr. Washington conducted in almost every Southern State.

Probably the most influential of the extension efforts is the Negro Farmers' Conference held annually at the institute. This conference brings together thousands of colored farmers from neighboring counties and hundreds from other parts of the State and neighboring States. In addition, many influential white and colored people from every part of the county have gone to Tuskegee to see the assembly guided by Dr. Washington. On the following day the large meeting, a "workers' conference," is held. This is composed of persons who are directing all forms of endeavor for the improvement of the Negro race. Closely connected with this farmers' conference are the farmers' institute and short course in agriculture. The farmers' institute is a monthly experience meeting of local farmers, with simple talks on improved methods by Tuskegee teachers. The short course, consisting of two weeks of study and observation at the institute, is widely attended by farmers of surrounding counties during the idle seasons on the farm.

The experiment farm established at Tuskegee in 1896 by the State legislature in conducting experiments in soil cultivation for the benefit of the colored farmers of the State.

The school publications include three regular papers and many valuable pamphlets. The Tuskegee Student is a bimonthly devoted to the interests of the pupils, teachers, and graduates. The Souther Letter, a record of the graduates and former pupils, is issued monthly and sent to persons interested in Tuskegee. The Negro Farmer and Messenger is a monthly paper devoted to the agricultural and educational interests of the colored race. The Negro Year Book is a compendium of valuable facts concerning the Negro in the United States.

The summer school, with a one-month's session, was attended in 1915 by 437 persons who had been teaching in every section of Alabama and in many neighboring States. The course includes review of elementary school subjects, industrial training, methods, observation, and practice teaching. About 40 teachers were employed.

Summer schools for Negroes.—The summer schools have played a very important part in improving the work of teachers in service. The colored teachers deserve to be commended on their attendance at summer schools. All the teachers interviewed at the schools visited had attended summer schools, with the exception of those teaching their first term, and they expressed an intention to attend some institution during the summer. It is not possible to mention all the schools that have served the State by providing summer schools for teachers, but in addition to Tuskegee Institute, the State Normal

School and the Agricultural and Mechanical College, the institutions that are especially deserving of mention for their good work along this line are Miles Memorial College, at Birmingham; Talladega College, at Talladega; and Selma University, at Selma.

Importance of training for Negro and type of education needed.—

In the development of a State it is obvious that a group of people forming over 40 per cent of the total population can not be disregarded. From the standpoint of health alone the white population of Alabama must be concerned about the Negro and his welfare. There are economic considerations, however, that would seem to be convincing in themselves. As a result of the boll weevil's inroads, a new type of farming has been developed in Alabama, and the process is a continuing one. The old "cotton farming" has given way to the raising of diversified crops and stock. The new farming does not require as much labor as the old, but it requires more intelligent labor. The ignorant Negro "hand" that served the planter's purpose when cotton was king is hardly competent to handle farm machinery and take care of stock. The problem of the modern farmer is not the supply of labor, but the supply of efficient labor. The readjustment period between the cotton farming and the new crops threw thousands of Negroes out of work, as is shown by the following paragraphs from the Alabama chapter on "Negro Migration in 1916-17," published by the United States Department of Labor.

A great majority of the Negroes have been wholly dependent for their subsistence on the owners or overseers of the land. The Negro tenants have always been accustomed and have, therefore, always expected to have provisions advanced to them through many months of the year. This was done either by the landowner, overseers, or by the merchants. To use the common expression, they expected to be "carried" while the crop of cotton was being made. When an average crop was made the result was satisfying both to the landowner and to the Negro cropper or renter. But the evil effects of this system have been felt most severely during the past four years. For many reasons the system has proved economically unsound.

In the first place, it was profitable only for extensive farming, and the fertility of the land has been constantly lessened. Neither the absentee farmer nor the Negro tenant, who was at best attached in only a temporary way to the land which he cultivated, was vitally interested in the improvement of the soil. As a consequence, some of the most fertile lands have become unproductive through poor cultivation and the continued planting of a single crop.

Again, the methods of conducting business under this system, by both the white landowners and the Negro tenants, have been unscientific. Partly because of the improvident habits of the Negroes and their frequent disregard of the binding importance of contracts many landowners have not been accustomed to keep strict accounts or to make strict settlements with their Negro tenants. The system was also conducive to idleness. The Negroes were not and profitably employed during the cotton planting and picking seasons, but

went without employment during the other months. Diversified farming requires labor in every month of the year, but in the cultivation of cotton the Negro could spend certain months away from the farm if he chose.

Thus as a farmer the Negro has known how to raise only one crop and that under definitely prescribed conditions. Planters and Negro tenants alike stood powerless before the conditions arising from the coming of the boll weevil. One of the effects of the weevil has been greatly to reduce the cotton acreage and to alter the methods of planting and cultivating it. It is not unnatural that the Negroes accepted these facts slowly. Economic pressure alone forced a reduction in the cotton acreage. They have never been skilled in stock raising, the growing of grain crops, peanuts, and forage crops. They have yet to learn how to prepare the soil for grain crops, how to plant and cultivate them, and how to harvest them. Everywhere in the black belt the remark was heard that the Negro renter "likes to plant cotton." He is skeptical of corn, velvet beans, peanuts, and hay.

For both landowners and tenants the period of transition in farming during the past two or three years has been one of great uncertainty, instability, and unrest. The period was preceded and attended by two other unfortunate conditions which brought financial ruin to many planters, merchants, tenants, etc. One of these was the low price of cotton and the other was the inability to borrow money at a reasonable rate of interest. "The exodus," said one of the most successful business men of the State, "originated in the low prices paid for cotton in 1913 and 1914. The farmers have not been prosperous; they have been exceedingly unprosperous. The present conditions grew out of the failure of a paying crop."

One of the underlying causes of the migration, therefore, may be characterized as the changed conditions incident to the transition from the old system of cotton planting to stock raising and the diversification of crops.

Where will the farmer look for this type of labor? Obviously the development of it on the farm itself will prove expensive, because machinery and stock represent too much capital to be experimented with. And the ability to handle farm machinery and tend high-grade stock presupposes a certain amount of "schooling." The question is not, what will the farmer have to pay for such labor? but where will he find it? Cheap labor often proves the most expensive in the end, because of the damage to farm land and equipment. Apparently the county training schools are best adapted to meet this need. It has been shown that these schools give the boys a good common-school education, with training in vocational agriculture and in the rudiments of carpentry and blacksmithing. The agricultural future of Alabama is dependent on a supply of efficient labor.

The influence of good schools in keeping the Negroes satisfied, and preventing them from migrating to other States, should be mentioned in this connection. Instances were found where Negroes had left one county in the State to go to an adjoining county, due to the attraction of superior school facilities. The holding power of a good school is commented on in the bulletin on Negro Migration published by the Department of Labor:

Though Negroes may go from a section in large numbers, as from Lowndes County, Ala., for example, which was severely affected by the boll weevil and the floods, yet few, if any, usually leave the neighborhood of a good school in such a locality. About the Calhoun colored school in Lowndes County, Ala., there are perhaps a hundred Negro farmers, who, through the instrumentality of the school, have been able to buy and pay for their lands. Not one of these men has been attracted away by the opportunities in the North; and other Negroes in this neighborhood, though living under hard conditions on great plantations, declare that they remain on account of the good school for their children. A number of other similar illustrations could be given.

While Alabama is primarily an agricultural State, it is wonderfully rich in mineral resources, notably coal and iron. An extensive industrial development seems to be inevitable. But here again a supply of skilled labor will be necessary, and in industry the labor will have to be even more skilled than on the farm. Carpenters, machinists, blacksmiths, and men skilled in various trades will be essential if Alabama is to develop her natural resources and become a great industrial center. Forty trades are taught at Tuskegee and twelve at the agricultural and mechanical school, but these two schools can not meet the present demand for skilled workers. Schools like the Industrial High School in Birmingham will help to meet this need, but at present the Birmingham school is the only one of its kind in the State. Unless the State makes an effort to supply the demand the problem will be left to a chance solution.

The fact that a good school is a commercial asset has been recognized by the industrial corporations in the Birmingham district. Some of them have pushed the development of public schools until the labor turnover has ceased to be a serious problem. In Jefferson County it is customary for the companies to supplement the pay of the public-school teachers and at a number of schools visited the teachers were receiving as much from the company as the county paid them. A number of the school houses inspected in Jefferson County were built by corporations especially for the children of their employees.

Fear has been expressed in some quarters that the teaching of trades to Negroes will bring the race into economic competition with white men and that this may cause trouble. Unless the industrial development of the State is to be retarded, however, there will be so much skilled work to do that the possibility of Negro workmen interfering with the opportunities of white workmen will be small indeed. For some years Negroes have been receiving trade-training, and have followed their trades in Alabama, and yet no industrial clashes between the races have occurred. Such troubles have been confined to the North, where conditions are very different. At the present time the State is making very little effort to teach trades to white boys.

and it would seem that some supply of skilled mechanics should be provided. Otherwise it will be necessary to bring in tradesmen from outside the State. Alabama is better prepared to train her own skilled workmen at home than she is to compete with wealthier States in the North for her skilled labor. And the importation of a large foreign element, unfamiliar with southern conditions, will further complicate the race problem in Alabama.

It is evident, then, that both from the standpoint of agriculture and industry, the education of the Negro along vocational lines is desirable and necessary. In order to determine just what kind of education is best adapted to his needs, the occupations now followed by the breadwinners of the race should be studied. The following table shows the vocations followed by Negroes in Alabama, according to the 1910 census of occupations. These figures are the latest available, but it should be borne in mind that since the census of 1910 the number of occupations followed by Negroes has increased, as a result of changing conditions.

TABLE 37.—Principal occupations of Negroes 10 years of age and over.

Occupations.	Males.		Occupations.	Females.	
	Number.	Per cent.		Number.	Per cent.
Agriculture, forestry, and animal husbandry.....	201,421	71.15	Agriculture.....	151,824	71.19
Extraction of minerals.....	16,170	5.71	Manufacturing and mechanical industry.....	2,747	1.29
Manufacturing and mechanical industry.....	32,595	11.51	Transportation.....	3	.00
Transportation.....	14,689	5.19	Trade.....	365	.17
Trade.....	6,365	2.25	Public service.....	2	.00
Public service.....	992	.35	Professional service.....	1,885	.87
Professional service.....	1,957	.69	Domestic.....	56,359	26.43
Domestic and personal service.....	8,177	2.89	Clerical.....	124	.05
Clerical occupations.....	761	.26	Total.....	213,279	100.00
Total.....	283,127	100.00			

It will be seen from the table that agriculture and its allied vocations predominate in the case of both men and women. In the case of the men, manufacturing and the extraction of minerals come next, and in the case of women, domestic service and manufacturing. Practically all the female breadwinners were reported as engaged either in agriculture or domestic service. Transportation, trade, and personal service are important vocations followed by men. It will be interesting to compare these figures with a tabulation of the occupations followed by the 2,266 graduates of the Agricultural and Mechanical College. The 2,266 graduates are divided among the departments as follows: Academic, 1,217; agriculture, 118; household economics, 704; mechanic arts, 227.

TABLE 38.—Vocations followed by graduates of Alabama Agricultural and Mechanical College.

Principals.....	163	Jeanes teachers.....	7
Teachers in rural schools.....	296	Directors of book establish- ments.....	2
Principals in high schools.....	24	Editors and journalists.....	8
Teachers in grammar or high schools.....	90	Bookkeepers.....	15
Doctors.....	41	United States farm demon- strators.....	2
Lawyers.....	5	Undertakers and embalmers.....	6
Dentists.....	8	Contractors and builders.....	8
Pharmacists.....	3	Farmers.....	840
Druggists.....	10	Housekeepers.....	498
Working at trades.....	302	Dead and unaccounted for.....	898
Bankers.....	1		
United States Government serv- ice.....	39	Total.....	2,266

These figures show that the State school has made of its graduates efficient workers in the vocations followed by Negroes in Alabama. As the skilled worker produces more wealth than the unskilled one, the Agricultural and Mechanical College has evidently been a paying investment to the State. Aside from economic considerations, however, the training of a safe and sane leadership for the colored race has been of inestimable value to the State.

Specific recommendations.—The committee makes the following recommendations on Negro rural schools:

1. That a larger portion of the public school funds be apportioned to Negro schools.

2. That salaries of competent Negro teachers be increased to such an extent as will induce those who have proved their competency to remain in the service of the schools.

3. That the number of Negro teachers be increased so that there will be a better ratio of teachers to pupils enrolled.

4. That the compulsory education laws be applied to all the children of school age, both white and colored.

5. That the course of study in Negro schools be made more practical and related more closely to the life of the children, so as to meet their needs.

6. That State aid be provided for county training schools on the basis of an annual appropriation of \$750 to each school, to match the \$750 now appropriated by the county board of education to maintain the school. The sum of \$19,500 is enough to aid the 11 schools now in operation, and to encourage the establishment of 15 more that are badly needed. State aid should be increased when possible, so that the schools may be better supported.

7. That the State aid counties in maintaining supervisors of primary work.

8. That the number of county industrial supervisors be increased to such an extent that their work can be carried on in the 45 counties having the largest Negro populations.

9. That the county boards of education consolidate Negro rural schools where possible so as to increase the number of two-teacher schools or three-teacher schools. In many counties the Negro population is so large that this can be done without necessitating transportation of pupils. Where practicable a man and his wife should be employed for the entire year, so that they may be community leaders as well as teachers.

10. That the minimum term in colored schools be six months.

11. That the State increase its appropriation to the Agricultural and Mechanical College to the amount of the Federal Government's aid, and provide the school with modern dormitories and an academic building.

12. That the State Normal School at Montgomery eventually be moved out of the city, provided with dormitories, and located on a tract of at least 100 acres of land. The present building should be sold to the city of Montgomery for a high school.

13. That if the State find it undesirable to carry out recommendations 10 and 11, the two schools be consolidated, and an agricultural and mechanical normal school be established, at such place as will be most accessible to the large body of the Negro population of the State. The school should have at least 150 acres of good land for cultivation, and ample provision for board and lodging of students. The school should be placed under the same control as the normal schools for the preparation of white teachers. With the Federal appropriation for agriculture and mechanic arts and the State appropriation the school should have an income of at least \$50,000.

Chapter X.

VILLAGE AND TOWN SCHOOLS.

General background.—Alabama has 233 incorporated towns of less than 2,500 population, with an aggregate population of 164,511. These comprise 55 places of 1,000 to 2,500 inhabitants each, with a combined population of 84,944; 66 places of 500 to 1,000 inhabitants each, with a combined population of 45,807; and 112 places of less than 500 inhabitants each, with a combined population of 33,760. The number of incorporated towns has been steadily increasing. In 1890 there were only 100 such places; in 1900 there were 173; and in 1910 there were 233. In 1890 4.7 per cent of the total population lived in towns of less than 2,500 population; in 1900, 5.8 per cent; and in 1910, 7.7 per cent. At the same time, the other rural population decreased from 85.2 per cent in 1890 and from 82.4 per cent in 1900, to 75 per cent in 1910.

Since the school laws of the State of Alabama class all places of 2,000 or more as cities, only the schools of those towns of less than 2,000 population will be discussed in this section. There are 211 such towns that are incorporated, or an average of 3 to each county. These small towns may be divided into the following classes: Mining towns, mill towns, and agricultural towns.

In the iron and coal mining sections of the State these small towns are made up of miners, bosses, and superintendents and their families. Some of these towns are models of neatness, beauty, and sanitation. The schools in some are very good. Several of the mill towns are also models. Some of the mining and mill companies are expending large sums of money to improve social and educational conditions so as to make their employees contented, and to afford them every opportunity to develop socially and intellectually. In others the companies take no interest in the lives of the employees and social and educational conditions are far from ideal.

The larger number of towns are found in the midst of the farming section of the State. These towns usually consist of a few stores, several churches, sometimes a bank, often a gin, a post office serving as a rural delivery center, and a school.

Administration and supervision of town schools.—As previously stated the schools in incorporated towns of less than 2,000 popula-

tion are managed and controlled by the county board of education as if they were not within the incorporated territory. There is no board of education in these towns except the trustees appointed by the county board for the district. This provision is a wise one. Indeed, the limit as to population could well be raised. The town school district is usually larger than the incorporated district. In fact, the town school district can be made any size the county board sees fit to make it.

As a result in Alabama there are few schools within a radius of 2 or 3 miles of the villages. In those States where the village school is independent of the county or township board it is not unusual to find a number of one-room schools within sight of the village school-house. When village schools are under the management of the county boards, they may be better classed and controlled as rural schools, as they are, or should be.

The rural town a center of business life.—Most of the villages in the rural communities of Alabama are the centers of business life of a considerable community. They are usually the trading points for the farmers of the neighborhood, who go to the village to buy and sell, to have farm implements repaired, to have mules shod, to borrow money at the bank until the crop is sold, or to deposit money. Some farmers live in the villages and rent their farms. At any rate, the village is dependent upon the surrounding country for its existence, and should be a part, and not independent, of the purely rural community.

The villager and the countryman must learn to cooperate. The way to bring about cooperation is to associate together and think together. One school for the entire community will help to bring about community thinking and community cooperation.

Association of town and country people.—The consolidated school at Five Points, Chambers County, is an illustration of what a community school will do, not only for the village, but for the entire community. Before the establishment of the consolidated school at Five Points the village and the surrounding country were dead; there was but little interest in farming. There was no intellectual or social life. The entire community was becoming "deader" each year. Finally, through the influence of a few men and women, a consolidated school was organized at Five Points, a village of 300 population. What was a dead village with a few stores became alive. There are now in the community six stores, a bank, a hotel, a gin, a blacksmith shop, and two churches.

Before consolidation, the most unattractive building at Five Points was the school building. It was weather-beaten and dingy, consisting of two classrooms—one large with a stage, one small—and a dark and narrow hall. It was poorly equipped with uncomfortable, home-

made desks and had painted walls for blackboards. The absence of windowpanes reinforced the usual free ventilation of such an old building. It was uncomfortable, insanitary, and uninviting; yet the children, the most precious product of the village and its most valuable asset, were compelled to spend seven hours each day, five days a week, and seven months each year, in this makeshift of a school building.

The children living in the country fared even worse, since they attended one or two teacher schools even poorer than the one at the village of Five Points. Now, the village children and country children living 6 or 7 miles from Five Points attend the same school in a modern school building. The location of the consolidated school at Five Points has proved a blessing not only to the children, but to the adults. The whole community, country and town, has been organized into the Five Points Community Association, in which young and old alike are eligible to membership. This organization holds meetings biweekly at the school building. The people do not meet just for the sake of holding a meeting, but to discuss community problems and current topics. The work of the Community Association is carried on by committees. A good idea of it may be had from the following outline:

1. *A committee on public schools.*—The duty of this committee is to improve and beautify school premises; to increase the supply of school apparatus; to build up a library; to provide playground equipment; to encourage school attendance; to provide instruction for the illiterate and others desiring a common-school education, but who are unable to attend the day school; and to encourage school visitation by patrons.

2. *A committee on health and community sanitation.*—It is the duty of this committee to obtain unified effort of the community to maintain sanitary conditions; to combat epidemics; to exterminate germ-carrying insects; to provide for the distribution of health bulletins; and to invite speakers, from time to time, to discuss health problems before the association.

3. *A committee on literary, musical, and social culture.*—This committee provides occasional literary and musical entertainments and social gatherings; has charge of the magazine exchange, arranges educational games; organizes and conducts a story-tellers' league and a reading circle.

4. *A committee on agriculture and home economics.*—This important committee cooperates with the county demonstration agent and other agencies established for the upbuilding of agricultural interests; improves home-life facilities in the community; arranges for farmers' educational meetings from time to time; plans the organization of pig, poultry, and canning clubs; and introduces approved systems of cooperative industries.

5. *A committee on finances.*—This committee considers the needs of every department of work and proposes quarterly budgets for the intelligent guidance of the association in making appropriations. It devises ways and means of securing funds for the prosecution of the association's work.

At the biweekly meetings, topics of general interest are discussed first. The session then breaks up into departments, each person

going to that in which he is most interested. The attendance of farmers, business men, and their wives often numbers 200 or more.

This one example shows how a decadent village community may be made alive by consolidating rural and village schools.

Reorganization on the six, three-and-three plan.—The difficulty of transporting children to school because of bad roads can be overcome to some extent by keeping the children of the first six grades in the school near their homes and transporting the older ones, or those in grades 7, 8, 9, to some central junior high school in the open country or village—provided such village is rural minded. If it is not, if it does not cooperate in every way with the purely rural community, it is no place for a consolidated school. If the village school is small it should not attempt more than junior high-school work, as some are now doing and failing to do well. Pupils of grades 10, 11, 12 in the smaller villages should attend a senior high school in one of the larger towns or the county high school.

The school a community center.—The rural village school must do more than make individuals intellectually efficient and able to struggle successfully for wealth, power, and influence. The reorganized village school should be a center for community reconstruction. One of the evils of rural and village life is monotony and lack of human fellowship, and too narrow thinking. The village schools serving as a center of community life for the people who naturally congregate at the village for business purposes would break up this isolation and provincialism. In many villages there are few vital topics of conversation. The village gossip has become a character in literature. There is need of some institution to create and conserve common interest. For this purpose there should be a common meeting place where there may be free and open discussion on the great topics of the day. For illustration, every village community should discuss local improvements, cooperative methods of buying and selling, proposed State legislation, national and even international problems. There is but one logical place for such discussions, and that is the public school, the one building in the community dedicated to democracy. The school buildings should be open not only for the discussion of public questions, but for purely social purposes, especially for the young people of the community. It is to be regretted that not many village school buildings in Alabama have been planned with the view of making them community-center buildings, there often being no auditorium or any other rooms suitable for holding public meetings.

Elementary school course of study.—The course of study used in village schools is not adapted to the environment. The same facts and the same illustrations are used in the rural town as in the city

schools. Arithmetic, for instance, is not given a rural application, most of the problems solved are of the counting house instead of the farm. The language lessons are based upon topics remote from the life and experience of the child instead of upon what is near on the farm or in the village. Geography is begun not at home but at some distant point. What little drawing there is is not based upon material from the field but upon lessons in books. Nature study has a very subordinate place and is mostly bookish. Community civics, hygiene, music, manual training, home economics, and physical training have not yet found a place in most of the small town schools.

A study of the time schedules of six small town schools reveals the fact that the subject of arithmetic is unduly emphasized in the primary grades, the time ranging from 100 to 400 minutes a week in the first grade, from 150 to 450 minutes in the second grade, and from 125 to 375 minutes in the third grade. That arithmetic is a fetish in these schools is evident, since the largest percentage of failures is in that subject. It is not unusual for a child in the first grade to fail in arithmetic. As a formal subject, arithmetic scarcely has a place below the third grade, at least not below the second grade. About the only number work that the child in the primary grades should have is the use of number facts that arise in his daily work in other subjects, as in hand work. If formal work is given it should deal with easy combinations. In the upper grades the time allotted to arithmetic in the small town schools of Alabama is usually 150 or 200 minutes a week. This is about the average amount throughout the country. In the primary grades spelling occupies from 75 to 300 minutes a week. It is doubtful whether spelling should be given as a subject separate and apart from the reading lessons in the primary grades. At least not more than 75 minutes a week should be given the subject. Reading naturally takes more time in the lower grades than any other subject, the time allotment ranging from 150 to 900 minutes in the first grade, from 150 to 750 minutes in the second grade, from 150 to 400 minutes in the third grade. After this grade the time allotment rapidly diminishes to 150 minutes a week in the seventh grade. Although the time allotment for reading in the primary grades is great the results are not what one would expect. In many instances only one supplementary reader is provided. In practice phonics are slighted.

Formal grammar is begun in most of the town schools in the third or fourth grade. One hundred and fifty minutes a week is the usual time devoted to it, beginning with the third grade and running through the seventh. But little attention is given to oral and written composition. Grammar as a formal subject should be offered below the seventh grade.

As previously mentioned, nature study holds a subordinate place or no place at all. The time usually allotted is 60 minutes a week. Nature study should lead up to and be included with much of the geography. The time allotted to geography is usually 150 minutes a week, beginning with the third or fourth grade and continuing through the seventh. United States history does not occupy the same important place as do many of the other subjects, as formal grammar and arithmetic. The usual time allotment for history is 150 minutes a week for two or three years. This would no doubt be sufficient for the subject in the elementary schools if it were preceded by history stories, biography and the like. Civics when taught is generally of the old type—an analysis of the constitution—instead of a study of community life.

Penmanship is practically neglected. Here and there some little time is given to the subject. A few more minutes a week could well be devoted to the subject in drills for movement and form. Music and drawing with the exception of one or two schools visited receive but little attention. Manual training and home economics are almost unknown in the elementary grades of the small town school. Physical training, which should have a place in every school program, is confined, with a few exceptions, to what exercise may be had at recess periods without supervision.

High school course of study.—The village high school course of study is bookish and almost purely academic. Practically all the small town high schools require English for four years, which is in accord with modern educational thought. Three years of mathematics are required, algebra two years, and plane geometry one year. Solid geometry and algebra are offered in the senior year. In many schools three years of history are required—two of European and one of American. Latin is an elective. Some schools also offer French or Spanish. The agriculture taught is of a bookish nature; usually there is no demonstration or home-project work. The sciences are usually taught without sufficient or any laboratory equipment. As an illustration of the subjects studied and the number of pupils studying each subject the course of study of the consolidated school at Five Points is presented:

First year:	Number of pupils enrolled.	Second year:	Number of pupils enrolled.
English.....	19	English.....	14
Arithmetic, $\frac{1}{2}$ year.....	19	Algebra.....	14
Algebra, $\frac{1}{2}$ year.....	19	Bookkeeping, $\frac{1}{2}$ year.....	14
General science, $\frac{1}{2}$ year.....	15	Commercial law, $\frac{1}{2}$ year.....	14
Agriculture, $\frac{1}{2}$ year.....	15	Latin.....	5
Latin.....	4	Agriculture, $\frac{1}{2}$ year.....	9
Domestic science.....	19	Botany, $\frac{1}{2}$ year.....	9
Manual training.....	19	European history.....	14

Third year:	Number of pupils enrolled.	Fourth year:	Number of pupils enrolled.
English.....	12	English.....	5
Physics.....	12	Solid geometry, $\frac{1}{2}$ year.....	5
Latin.....	4	General review of different subjects, $\frac{1}{2}$ year.....	5
Civics, $\frac{1}{2}$ year.....	8	Chemistry.....	5
Economics, $\frac{1}{2}$ year.....	8	U. S. history.....	5
European history.....	5		
Spanish.....	7		

At Five Points, as nowhere else in Alabama, one would expect to find a course of study related to village and rural life, but upon examination it is found to consist largely of the subjects offered in a college preparatory course. In the midst of one of the great farming sections of Alabama the subject of agriculture has scarcely a place. Home economics and manual training are given only for one year. Bookkeeping is that of the counting house instead of farm bookkeeping as it should be. Fairly well-equipped laboratories are provided for the teaching of physics and chemistry, but these subjects are not given a rural application. Botany could be made a live subject by relating it to the flora of the region.

The course of study places too much stress upon algebra and geometry which are probably the least important subjects in the whole course for the average farm boy or girl. A year of algebra and constructive geometry might be required, but to require mathematics for three years and then to offer it as an elective in the fourth year can not be defended in a small high school or in fact in any school. The course of study at Five Points and every rural village in Alabama, should be revised and made a farm community course of study.

Improvement of rural and village course of study.—The village schools in Alabama, as well as elsewhere, are weak and are not living up to their possibilities, because they do not provide education in terms of rural experience. One of the fundamental principles in education is that instruction should begin with that which is simple and familiar and work out to that which is more complex and remote. To know things at home is to know the world. If the rural village schools of Alabama were to follow this fundamental principle, they would make use of home geography, of problems in arithmetic related to rural life instead of to city life, of local history, of community civics; in fact, there is no subject in the elementary school course that can not be related to rural village life.

Agriculture may be taught in a practical way in a village school. Grounds suitable for demonstration purposes may be found in or near every village. Boys living on farms may, by means of home projects, apply the principles of agriculture learned in the classroom and on the school demonstration plat. Science teaching may have

rural application. Practical application may be made of chemistry in the analysis of soils. Botany, with economic applications, is possible.

The course should include home gardening directed by the school. In the villages visited there were many unsightly backyards and vacant lots that could have been made attractive and productive if they had been planted into gardens. It is true that many of the children living in villages cultivate gardens at home, but their efforts are undirected. If the work were directed by the schools, many correlations of gardening with arithmetic, language, drawing, manual training, nature study, and other subjects would be possible.

When the materials used in the village schools are drawn largely from the cities, and the child's attention is continually directed to city life, he is not taught to appreciate his surroundings nor his opportunities. He, therefore, goes to the city at the earliest moment to seek wealth and power, when, in reality, both of these might be found in his own village community. It is not advocated that every rural or village youth remain in a rural environment, but that the village course of study be based upon rural life so that more children may see the many opportunities in their own community.

Mill and mining town schools.—The schools in the mill and mining towns of Alabama, supported by public funds, are much the same as those of rural villages just described. In Chambers County the cotton-mill corporation operating the mills at Shawmut and the three other mill towns in that county add several thousand dollars a year to the running expenses of each of the schools for salaries, a longer school term, free textbooks, and other things that the county board can not provide under the present system of assessing property. The company has erected modern sanitary school buildings in each of the towns. A cottage is provided for the principal of each town school, a teacher cottage is also provided, a charge of \$15 a month being made for room and board. The company also supports a kindergarten in each town, paying the teachers, providing supplies, furnishing a building, etc. Surrounding each school building are large playgrounds well equipped with play apparatus.

In each town there is a night school supported by the company. The mill workers who desire to become more proficient are given instruction in such subjects as will aid them to realize their desires. Most of the night-school students study textiles. Many of the illiterate are taught to read and write.

The cotton-mill company in Chambers County has already made plans for part time classes for older boys and girls who have dropped out of school and who are working. They can work half of the day and attend school the other half. The pupils will have classroom

instruction regarding textiles and make the practical application in the mills. Other subjects, as literature, history, community civics, personal hygiene, and home economics should have a place in the part-time courses.

A feature of the educational program of each of the mill towns is a lyceum course which is offered during the winter months in a community building with which each town is provided. Moving pictures are shown three times a week. The community halls are used for social and recreational purposes. The next step in the use of these halls would be to have them open for the discussion of public questions.

At the mining towns where the Tennessee Coal & Iron Co. has mines may be found schools equal or even superior to those in the cotton-mill towns of Chambers County. The school buildings are beautiful and well adapted to school use. The playgrounds are large and well equipped. The school gardens are unexcelled in the State. The social and recreational life of each community is well provided for by means of a clubhouse.

The mill town schools in Chambers County and the mining town schools supported in part by a private corporation are examples of what financial support will do for schools. When one goes from these schools to most other town schools in the State it seems like going from a beautiful well-kept avenue in a large city to a back alley.

School libraries.—Most of the town schools contain a library, but in many instances the books are too few in number and not well selected. A separate room is rarely provided.

The library should comprise books to supplement the texts used in school literature, biography, history, books of travel, and books of science popularly treated. A number of good books of fiction should be provided for general reading. At least three or four magazines treating of the topics of the day should be on file for the use of the schools and the public. Several magazines on teaching and general educational topics should be provided. A village school library thus equipped would add immensely to the efficiency of the schools. The library room should be open to the public as a reading room.

As an illustration of the use made of a town library, data regarding the library at Langdale are presented: This library is not directly connected with the school, being supported by the cotton mill corporation operating at Langdale, but it is on the school grounds and works through the schools. In any other town a purely school library in charge of a librarian could no doubt accomplish as much.

Data of the library at Langdale.

Year.	Books charged.	Magazines charged.	Magazines received.	Number of visitors.
1913.....	1,309	613	487	2,474
1914.....	1,235	860	633	4,973
1915.....	1,741	1,161	663	6,104
1916.....	2,123	1,180	647	4,508
1917.....	1,849	553	814	6,217
1918.....	2,816	234	756	4,627
Total.....	11,073	4,681	3,932	27,301

Retardation and elimination.—Since the elementary school course in Alabama is seven years in length, the child entering at 7 years of age and making one grade each year completes the course at 14. In compiling the data on age and grade children of the first grade 6 and 7 years of age are considered normal; all 8 years of age and over, over age. In the second grade children under 7 years of age are considered under age; all 7 and 8 years of age, normal, and all 9 or more years of age, over age, and so on throughout the grades, allowing two years for the normal age. This is a liberal allowance for normality when the fact is taken into consideration that the ages are taken at the beginning of the term.

TABLE 39.—Distribution of white children by age in towns below 2,000 population.

Grades.	Under 6 years.	Over 6 years up to 7 years.	Over 7 years up to 8 years.	Over 8 years up to 9 years.	Over 9 years up to 10 years.	Over 10 years up to 11 years.	Over 11 years up to 12 years.	Over 12 years up to 13 years.	Over 13 years up to 14 years.	Over 14 years up to 15 years.	Over 15 years up to 16 years.	Over 16 years up to 17 years.	Over 17 years up to 18 years.	Over 18 years up to 19 years.	Total by grades.
I.....	300	1,893	2,088	1,670	1,023	550	267	184	119	61	18	10	6	3	9,265
II.....	18	177	1,240	1,807	1,097	627	379	200	143	72	29	11	3	...	5,503
III.....	...	33	289	980	1,347	954	655	466	277	118	79	39	...	...	5,083
IV.....	...	48	215	829	1,238	873	714	44	260	236	62	17	4	...	5,050
V.....	...	67	225	755	1,005	875	608	360	248	61	29	...	...	...	4,206
VI.....	...	6	68	212	633	927	746	570	338	165	56	22	...	...	3,734
VII.....	...	...	...	...	2	20	168	541	808	566	374	804	171	61	3,315
VIII.....	...	...	...	...	...	15	133	307	400	308	344	217	175	...	2,079
Total of ages.....	378	2,068	4,663	4,368	4,508	4,382	4,003	4,031	3,473	2,639	1,920	996	506	278	38,232

TABLE 40.—Distribution of town children (white) with reference to normal age.

Grades.	Number in each grade.			Total in each grade.	Per cent in each grade.		
	Under age.	Normal age.	Over age.		Under age.	Normal age.	Over age.
I.....	300	4,960	3,634	8,333	3.6	59.6	36.8
II.....	195	2,747	2,861	5,803	3.4	47.5	49.1
III.....	323	2,177	2,584	5,084	6.4	42.8	50.8
IV.....	265	2,077	2,710	5,050	5.2	41.1	53.7
V.....	328	1,760	2,153	4,241	7.7	41.3	51.0
VI.....	266	1,546	1,869	3,784	7.0	41.0	52.0
VII.....	190	1,946	1,779	3,915	4.9	50.0	45.1
VIII.....	148	797	1,124	2,079	7.1	37.8	55.1
Total.....	2,068	17,468	18,764	38,300	5.4	45.8	48.8

A comparison of these data with similar data for 62 counties (schools outside of cities) in Colorado shows that the rate of retardation in Alabama towns is large. In the 62 counties of Colorado 10 per cent of the children are under age, 63 per cent normal, and 27 per cent average.

Causes of retardation.—Even without comparison with other school systems it is evident that there are too many overage children in the town elementary schools. The cause is, in the opinion of the committee, due to several factors and includes irregular attendance, inadequate supervision, uninteresting and ineffective teaching, and a course of study not adapted to needs of children. It is impossible to say which is the greater factor in causing retardation, but poor teaching and irregular attendance which is conditioned to a certain extent upon teaching are the chief contributing factors.

The problem.—The seriousness of retardation has not been realized by most principals and teachers. It is concerned with the results to the child himself, the educational loss to the State, and the financial loss which comes from the added expense of repeating grades. Of these the first two are the most important. The child loses interest and drifts along or leaves school altogether while the State loses the possibility of adding to its population an educated citizen. A majority of the children are so retarded that they do not go far enough in school to acquire the skill, knowledge, and culture which the school aims to inculcate. Their education is not comprehensive, and the school impressions are superficial. With a retardation rate of 49 per cent many children complete only a few grades, thus merely passing beyond illiteracy. Some of these may, if they have the inclination, become fairly well-educated citizens by reading newspapers and magazines, but the chances are that they will not since they do not have a background of knowledge sufficient to interpret what they read.

Education of the teachers.—The educational and professional standard for elementary teachers should be four years high school and two years normal school work. Measured by this standard the town schools of Alabama fall short. The amount of schooling the teachers of these schools, both elementary and high, have had beyond the seventh grade averages about three years. Of the teachers reporting to the survey committee 24 per cent have not attended school beyond the elementary grades, with the exception of the few who have attended one or more summer schools. Of those who have attended high school 8.4 per cent have attended 1 year; 15.7 per cent 2 years; 25.3 per cent 3 years; and 58.6 per cent 4 years.

Of the total number of teachers reporting 32.8 per cent have attended and 14.3 per cent have graduated from a normal school.

Many of those who have attended normal school have done so for only one term. One and two-tenths per cent have graduated from college, and 15 per cent have attended college a year or more or for a summer term or two.

It is interesting to compare the preparation of town teachers in an old State like Alabama with the preparation of rural school teachers in a new State like Arizona. In Alabama 42.2 per cent of the town teachers have attended high school for four years, in Arizona 88.4 per cent of the purely rural teachers have attended school four or more years above elementary school, and 68.4 per cent have five or more years of secondary and higher education.

Teachers' salaries.—One reason that the teachers in Arizona are better prepared than those in Alabama is that the annual salary of teachers in the one State is two or three times that in the other—all this in spite of the fact that Arizona is a desert country, only a few fertile spots appearing here and there. In Alabama there is mineral wealth, the mountains and some of the plains are covered with virgin forest, nearly every part of cleared land yields cotton and corn, yet the teachers are not paid salaries such as afford a motive for making special preparation for teaching.

The prevailing salary for village teachers in Alabama is between \$400 and \$500 a year, while for the county at large it is between \$500 and \$600; in the Middle Atlantic States between \$500 and \$600, in the Southern States between \$400 and \$500, in the Central States between \$500 and \$600, and in the Western States between \$700 and \$800. The village school principals in Alabama receive between \$900 and \$1,000, while for the county at large they are paid from \$1,100 to \$1,200.

Village school principals.—Though the village schools of the State of Alabama are under the supervision of the county superintendent, the principal should do some supervising, especially in the larger villages. The chief function of the village school principal, however, is to be a community leader in the improvement of educational conditions. In too many instances he is content to close the school building after the day's work and then to drift along with the current of village thought on educational subjects. Village community life is simple, but in most instances the members do not work together. An organizer and director of social and educational life is needed. The principal of the village school district, whether it embraces only the village proper or the entire community, should be more than a pedagogue. He should be an educator in every sense of the term, a community leader—not a follower, a guide setting up ideals of accomplishment. In too many schools visited in Alabama the principals do not realize their opportunity as leaders nor have they caught the

vision of better village life and better school facilities for educating the whole community, young and old.

Specific recommendations.—1. Continue the present plan of placing towns of less than 2,000 population under the control and management of the county board of education.

2. Encourage the levy of local taxes in all village and town districts so as to enable the board to discontinue the practice of charging tuition fees.

3. Limit the smaller village to nine grades of work. Organize the seventh, eighth, and ninth grades as junior high school. Organize the larger village schools, elementary schools (grades 1-6), junior high school (grades 7, 8, 9), and senior high school (grades 10, 11, and 12).

Chapter XI.

THE DISTRICT AGRICULTURAL SCHOOLS AND COUNTY HIGH SCHOOLS.

I. DISTRICT AGRICULTURAL SCHOOLS.

History of their organization.—Alabama was the pioneer in bringing into existence a system of congressional district agricultural schools. This work was begun in Alabama 17 years before a similar system was established in Georgia, and these States are the only States which have as a part of their educational system an agricultural school for each congressional district. The Alabama system of congressional district agricultural schools was initiated under the provisions of a bill, approved February 28, 1889, "To establish a branch agricultural experiment station and branch agricultural school in North Alabama." Under this act two schools were organized, one at Athens and the other at Abbeville.

It was provided originally that the board of control for each institution should consist of the commissioner of agriculture, the director of the experiment station at Auburn, and five progressive farmers. The board of control was given the power to elect presidents, teachers, and directors, and to manage the schools and stations as it should think best. For the first year the State appropriated \$3,000 to each school, and for every year thereafter \$2,500, payments being made quarterly. The board of control was given authority to purchase land, not exceeding 40 acres for each station, and to construct the necessary buildings and other improvements. It was provided that experiments should be made at the stations to advance the interests of scientific agriculture and that chemical analyses should be made by the State chemist under the supervision of the commissioner of agriculture.

The act establishing these schools was amended on February 13, 1893, the amendment providing that the schools should receive \$3,000 annually and the board of control be authorized to purchase 80 acres of land for each school. Similar acts of the legislature have brought into existence seven other district agricultural schools, so that at the present time Alabama maintains nine agricultural schools, which according to the original plan were located one in each congressional district, but with the redistricting of the State in 1915, two schools

were included within the limits of the seventh district. It would, therefore, appear that the State superintendent is correct in his suggestion that the legislature of 1919 should change the names of these schools by omitting the word "district."

At present each school receives an annual appropriation for maintenance of \$4,500, with the condition that \$750 must be used by each school in the specific work of agriculture. Each school derives approximately \$12 a year matriculation fee from each pupil entering the school. Various acts since 1889 have finally placed the schools under a board of control consisting of the governor, the superintendent of education, the commissioner of agriculture, and two local members appointed by the governor, residing in the congressional district in which the school is located.

Changing the original purpose of the schools.—There are many evidences to show that these schools have made in most cases an honest effort to comply with the purpose of the legislature. They failed to accomplish the primary purpose of their establishment, owing to the fact that the people made them serve what they felt was at the time of their establishment their greatest need irrespective of mere name. They changed the institutions which were originally intended to serve a whole congressional district, to purely local schools with a local patronage and organized them to suit their own needs. In 1900-1901 the total patronage of the schools reached 2,243.

This development caused dissatisfaction, and in response to this feeling there has been a formal effort to bring them nearer the original purpose for which they were organized. The superintendent in his 1912-13 report says:

Last summer at the close of the year's work the board of control of these schools reorganized completely the course of study, with a view to making agriculture and agricultural instruction both in theory and practice the paramount consideration of every student connected with these institutions. Whatever criticism the public may have made of these district schools was based upon the theory that they were not doing the full amount of agricultural work intended by the law establishing them. The board believes that the complete reorganization of the course of study upon which these schools have entered for the year now begun will remove all basis for reasonable complaint of this kind.

In further commenting upon these schools the superintendent in his 1918 report says:

For more than 10 years, however, the agricultural schools have been brought into rather serious competition with county high schools, and since the latter are regarded as county institutions and are often able to get appropriations from the county boards of education and boards of revenue, it has become increasingly difficult for the agricultural schools to retain their hold upon popular favor. In fact, they have not infrequently been referred to as the "fifth wheel" in our educational system.

It would appear now that these schools have been given the last opportunity to function in accordance with the acts establishing them by complying with the requirements set up for vocational agricultural instruction by the State board for vocational education.

In keeping with the Federal vocational educational act the State superintendent says in his 1918 report:

The State board for vocational education arranged with the board of control of the agricultural schools to introduce vocational agriculture in all these schools for the year beginning July 1, 1919. This has meant the employment of a specialist in agriculture who gives his entire time to this work. The school provides equipment to the amount of \$300 or more and a maintenance fund of \$100 annually. The general course of study has been revised and a special course of study has been prepared under the direction of the State superintendent of education in keeping with the Federal requirements, 50 per cent of the pupils' time being given to vocational agriculture including supervised project study and general instruction in agricultural projects. The remaining 50 per cent of the time is devoted to English and kindred subjects, such as will give culture and good citizenship training.

Teaching staff of the district agricultural schools.—Three of the nine principals are also the vocational teachers of agriculture. Data gathered through a questionnaire and by personal visitation to each of the nine schools show that the principal of each school is either a graduate of the Alabama Polytechnic Institute, the University of Alabama, or of an institution of like grade. All the agricultural teachers are graduates of the Alabama Polytechnic Institute except two—one a graduate of the Mississippi A. & M. College and the other a graduate of the Peabody College for Teachers. A study of the preparation of the other teachers in the schools shows that many of them are graduates of the Alabama Girls' Technical Institute, the University of Alabama, the Alabama Polytechnic Institute, the Woman's College at Athens, and other denominational institutions, as well as a few who are graduates of only a State normal school.

A discussion of teacher-training in agricultural education will be found in the chapter relating to the Alabama Polytechnic Institute. The principals and teachers of vocational agriculture receive salaries ranging from \$1,800 to \$2,800 a year. All the agricultural teachers receive \$2,000 a year except in cases where the agricultural teacher is also principal of the school. There is one exception to this where the agricultural teacher receives only \$1,800.

Student enrollment.—The total enrollment for this year is 1,217. Of this number there are 550 boys and 667 girls. Of these, 258 boys and 289 girls, respectively, are from farm communities.

Some of these schools are merely local schools and some reasonably representative. To show this the following figures are presented:

DISTRICT AGRICULTURAL SCHOOLS.

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THIRD DISTRICT AGRICULTURAL SCHOOL, ASSEVILLE, ALA.

1914-15:		1917-18:	
Barbour.....	2	Barbour.....	2
Coffee.....	2	Dale.....	3
Henry.....	68	Henry.....	62
		Houston.....	1
	72		68
1915-16:		1918-19:	
Montgomery.....	1	Barbour.....	2
Henry.....	86	Dale.....	4
	87	Henry.....	60
			66
1916-17:			
Dale.....	3		
Montgomery.....	1		
Henry.....	86		
	90		

FOURTH DISTRICT AGRICULTURAL SCHOOL, SYLACAUGA, ALA.

1914-15:		1916-17:—Continued.	
Bibb.....	2	Elmore.....	1
Calhoun.....	1	Jefferson.....	2
Clay.....	1	Shelby.....	2
Coosa.....	3	Talladega.....	120
Shelby.....	3	Tallapoosa.....	2
Talladega.....	123		148
Tallapoosa.....	2		
Tuscaloosa.....	2		
	137		
		1917-18:	
1915-16:		Bibb.....	2
Bibb.....	2	Clay.....	6
Calhoun.....	1	Coosa.....	5
Clay.....	6	Crenshaw.....	1
Chilton.....	1	Jefferson.....	1
Coosa.....	6	Lee.....	2
Elmore.....	1	Shelby.....	1
Jefferson.....	5	Talladega.....	180
Shelby.....	1		148
Talladega.....	115		
Tallapoosa.....	1	1918-19:	
	139	Calhoun.....	2
		Clay.....	3
1916-17:		Coosa.....	23
Bibb.....	2	Etowah.....	1
Clay.....	10	Jefferson.....	1
Chilton.....	1	Lee.....	1
Coosa.....	5	Talladega.....	183
Dallas.....	8	Tallapoosa.....	8
			167

EIGHTH DISTRICT AGRICULTURAL SCHOOL, ATHENS, ALA.

[Average for four years.]

1914-18:		1918-19:	
Limestone.....	150	Limestone.....	151
Lawrence.....	5	Lauderdale.....	2
Lauderdale.....	4	Morgan.....	1
Morgan.....	3	Walker.....	1
Madison.....	5		
Cullman.....	2		155
	<hr/>		
	169		

SIXTH DISTRICT AGRICULTURAL SCHOOL, HAMILTON, ALA.

1914-15:		1916-17:	
Marion.....	165	Marion.....	150
Franklin.....	27	Franklin.....	29
Fayette.....	23	Walker.....	17
Walker.....	14	Fayette.....	12
Pickens.....	7	Tuscaloosa.....	5
Tuscaloosa.....	5	Winston.....	4
Lamar.....	3	Lamar.....	7
Jefferson.....	2	Lauderdale.....	2
Colbert.....	1	Colbert.....	2
Lauderdale.....	1	Pickens.....	1
	<hr/>	Jefferson.....	1
	248		<hr/>
	<hr/>		239
	<hr/>		
1915-16:		1917-18:	
Marion.....	105	Marion.....	155
Franklin.....	30	Franklin.....	124
Fayette.....	20	Walker.....	11
Walker.....	16	Fayette.....	8
Lamar.....	6	Lamar.....	6
Tuscaloosa.....	4	Tuscaloosa.....	6
Pickens.....	2	Jefferson.....	4
Colbert.....	2	Pickens.....	1
	<hr/>	Colbert.....	1
	185	Coosa.....	1
	<hr/>	Marshall.....	1
	<hr/>		<hr/>
			818

FIRST DISTRICT AGRICULTURAL SCHOOL, JACKSON, ALA.

1914-15:		1915-16:	
Clarke.....	54	Clarke.....	63
Washington.....	2	Washington.....	2
	<hr/>	Choctaw.....	1
	56		<hr/>
	<hr/>		66
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FIRST DISTRICT AGRICULTURAL SCHOOL, JACKSON, ALA.—continued.

1916-17:

Clarke	57
Washington	5
Choctaw	1
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	63
	<hr/>

1918-19:

Clarke	69
Washington	5
Choctaw	6
Monroe	1
	<hr/>
	71

1917-1918:

Clarke	80
Washington	7
Choctaw	6
	<hr/>
	73
	<hr/>

A comparative statement concerning the growth in enrollment by years of the county high schools and the district agricultural schools is of interest:

Year.	County high schools.	District agricultural schools.	Year.	County high schools.	District agricultural schools.
1911.....	2,317	1,004	1916.....	5,468	1,157
1912.....	3,079	1,082	1917.....	5,887	1,219
1913.....	3,697	1,101	1918.....	5,517	1,139
1914.....	4,183	1,082	1919.....		1,217
1915.....	4,576	1,075			

Of the total enrollment of 550 boys in the district agricultural schools this year only 158 are taking the vocational course in agriculture. Of the enrollment of vocational pupils in agriculture 28 pupils are not from farms, and are depending upon the school farm to supply them with sufficient facilities for carrying out the six months' directed or supervised practice in agriculture.

Serious losses of enrollment through elimination.—In the agricultural schools during the past year serious losses are shown in many instances. The minimum retained in any school is 42 per cent and the maximum 96 per cent. The average percentage retained in the agricultural schools is 65 per cent.

In the farming sections where boys are needed in the spring more elimination would naturally be expected than in those sections where children are not demanded for work. Another factor which greatly affects the school attendance this year is that of Spanish influenza. This presented a very abnormal condition in some sections. Many local boys, who were required to remain at home to assist their fathers in the spring farm work, are carrying their required six months' su-

pervised practical work under the supervision of the vocational teacher. This would not be true if the boys' home farms were more than 15 miles distant from the school. Hence, the greater effectiveness in vocational agricultural instruction with pupils who are living a reasonable distance from the school rather than with boys who are boarding, and when returning home before the close of the school to assist in farm work are beyond reach of supervision by the agricultural teacher.

The number of students living in dormitories and consequently beyond the immediate influence of the school when at home is a negligible quantity. This is shown in two ways: (1) By the small representation from counties outside of the county in which the school is located, and (2) by the fact that only three of the schools provide dormitory facilities.

Course of study in the district agricultural schools.—Only two courses are offered in the district agricultural schools—the general or science course of four years and the four-year vocational agricultural course. These courses are uniform for all the schools and are adhered to closely. There is, however, an unnecessary repetition of agricultural instruction in that all pupils before reaching these schools are required to take a prescribed general course in agriculture in the seventh grade. Those pupils taking the science course in the first year are again required to take a half year of elementary principles in agriculture, using a general textbook of the same class as that used in the seventh grade. The boys are required to take farm shop and the girls domestic art twice a week throughout the year. The agricultural work of the first year science course also calls for home and school gardening. This practical work in agriculture, including farm shop work, parallels the first year's work of the vocational course in agriculture, where the boys are required to take during their first year of southern field crops and principles of bookkeeping and farm accounts.

On examining the character of the agricultural instruction in each of these courses it has been found that many boys elect the science course, because they get at least two years' work in agriculture without being required to do any supervised practical work for at least six months, and still receive the same school credit. This explains in a large measure the small percentage of enrollment of boys in the vocational course. Latin is taught in some of these schools, but is in the process of elimination.

A representative class schedule of one of these schools is as follows:

Daily schedule of the fourth district agricultural school.

Hour.	Mr. Williamson.	Mr. Nichols.	Miss Wideman.	Miss McNeill.	Miss Hale.
8.15-8.30		Devotional.....	Devotional.....	Devotional.....	Devotional.....
8.30-9.10	Latin III.....	Nonvoc. Agr. I. Bot. I.....	Chemistry IV.....	English II.....	Dom. Arts II.
9.10-9.50		Nonvoc. Agr. II. IV.....	Geometry III.....	English I.....	Dom. Sc. II.
9.50-10.30	Physics III.....	Voc. Agr. I.....		Spelling I. Comp. I	Dom. Sci. II.
10.40-11.20	Latin II.....	Voc. Agr. I.....	Geometry IV.....	English III.....	Dom. Arts I.
11.20-12.00	Latin I.....	Voc. Agr. I.....	Geometry II.....		History IV.
12.30-1.10	Latin IV.....	Voc. Agr. II.....	Algebra I.....	History III.....	History II.
1.10-1.50		Voc. Agr. II.....	Algebra II.....	Comp. III.....	
1.50-2.30	Geometry III.....	Voc. Agr. II.....	Arith. I.....	Comp. II.....	English IV.

There is at each school a vocational teacher of agriculture who devotes three periods daily to each of two classes. The balance of his time, or about two periods a day, is devoted to teaching nonvocational agriculture in the science course.

The three years of science in the vocational course is taught by three different teachers and must of necessity lack coherence and a proper correlation with vocational subjects.

Material equipment of the schools.—1. Buildings. The school buildings at Hamilton, Albertville, Abbeville, and Wetumpka are quite satisfactory for the purpose intended. The school buildings at the other places are more or less makeshifts so far as provision for vocational work is concerned.

At least one room has been set aside for vocational agricultural instruction at each school. These rooms are of the combination laboratory and recitation type and are supplied in the majority of cases with very satisfactory furniture, consisting of flat-top tables with drawers, and recently constructed filing cases. All the classrooms may be used and are used for laboratory work in soils, farm crops, and horticulture.

The striking thing in connection with the investigation of the equipment and facilities for carrying on agricultural instruction is that prior to this year the schools had provided practically no laboratory equipment. There is every evidence that in the past the agricultural instruction in these schools has been of the most bookish kind.

Not until this year have the schools been required by the board of control to set aside any definite amount for the purchase of equipment which would be in any sense adequate to carry on agricultural instruction. With the introduction of vocational agriculture this year they have been required to set aside \$300 for laboratory equipment and \$100 for maintenance. Uniform laboratory equipment,

including illustrative materials, is provided for in agricultural schools and in county high schools that have introduced vocational departments of agriculture.

The libraries in the schools at Hamilton and Blountsville were burned with the school buildings and have never been replaced. All general libraries in the other seven schools, with the exception of three, might as well have been burned so far as their daily use is concerned. This feature of the schools has been woefully neglected. However, each school has complied with the requirements of the State board for vocational education in securing the required reference books bearing directly upon agriculture. Each school has, with the exception of three, provided itself with a good supply of bulletins issued by the State experiment station and the United States Department of Agriculture. Practically all the schools have carried out the instructions of the State supervisor of agriculture in cataloguing these bulletins so as to make them readily available for instructional purposes. Each school has provided the required list of current agricultural publications. These amount to approximately six for each school.

Only two schools have made any real provision for science instruction. In four of the schools there is practically no science laboratory space, much less any equipment. This feature of the schools is very poor. Here again, these schools, so far as equipment for science instruction is concerned, are not on a par with the county high schools.

Summary needs of material equipment.—Libraries, laboratories, and other classrooms, suitable for the study of agriculture, and the various sciences related thereto, should be given emphasis in this type of school. The school should assume the responsibility for a well-rounded education of the pupil in all matters pertaining to agriculture and country life. Classrooms and laboratories should be adapted to the special purposes of the school. Equipment for the classrooms should be selected because of its adaptability to training in agriculture. Submitted to the test of practical farming much of the equipment usually found in the science laboratories in these schools would be omitted, and other equipment would be selected. Running water and gas of some form should be required in all of these schools.

2. School farms.—The following table will indicate to some extent the area and use of the school farm:

and

area

area

area

TABLE 41.—Land used for instruction.

School.	Land owned by school (acres).	Land used for instruction (acres).	Purpose.
Wetumpka.....	80	9	Revenue.
Abbeville.....	47	10	Do.
Evergreen.....	8	6	Do.
Jackson.....	30	5	Do.
Athens.....	150	10	Do.
Blountsville.....	72	30	Do.
Albertville.....	70	4	Do.
Sylacauga.....	40	5	Do.
Hamilton.....	80	6	Do.

The answers to the question, "Do you require supervised work on the farm?" are given below:

Wetumpka: No. Only those who have vocational projects on the farm have supervised practical work there. Formerly all male pupils did some practical agricultural work.

Abbeville: No. Only plot experiments and variety tests done by the farm superintendent under direction and used as a demonstration and for note taking.

Evergreen: Yes. This work is in the construction of fences, poultry houses, self-feeders for hogs, hotbeds, cold frames, and garden work. Each boy worked about two periods per week (one and one-half hours all at once) at this.

Jackson: Yes. First assistant takes boys two hours each week. General farm work.

Athens: Yes. Projects. Each vocational student has one or more projects. (Note: An error in returns.)

Blountsville: Yes. We require the vocational boys to have group projects which are conducted on farm and supervised by teacher of vocational agriculture.

Albertville: Yes. We started in the fall to require two hours per week on the farm from all nonvocational students (boys), but influenza and other troubles hindered this program. We have done whatever farm work was needed, but not as systematically as I had planned.

Sylacauga: No.

Hamilton: Yes. Three acres crop rotation. Five acres orchard project. One-eighth acre flower garden. One-fourth acre tomato growing.

It is quite evident from the above table that the school farm is utilized to a very limited extent for teaching purposes. It affords, in some cases, an opportunity for landless boys enrolled in the vocational course in agriculture to meet the requirements of the six months' supervised practical work. Strange to say, these boys as a rule are from the neighborhood in which the school is located and not necessarily boys who are boarding, and therefore from a distance.

In some cases the school is used to give pupils practice in farm carpentry. In three schools only is the agricultural instruction of the school to any extent correlated with work on the farm.

To show the inadequate equipment of these schools for instruction in live stock, including work in animal husbandry, dairying, and poultry, the following data are given for each school:

Abbeville: Eighteen Duroc hogs; 2 mules. (Hog pasture being broken at time of visit and hogs to be sold.)

Wetumpka: Eight Duroc hogs; 2 mules.

Evergreen: One horse; 13 Duroc hogs; 12 head of poultry.

Jackson: Two mules; 9 hogs.

Sylacauga: Two mules; 12 hogs; 14 head of poultry.

Albertville: Two mules; 2 bulls; 1 calf; 6 heifers; 5 hogs; 29 small pigs.

Athens: Four mules. (Farm rented.)

Blountsville: One horse; 1 mule.

Hamilton: Two mules; 1 bull; 2 hogs; 26 head of poultry.

The farm buildings are poor, and very few are suitable for demonstration purposes. None of the barns have anything about them of educational value. In most cases they are nothing more than mere shacks.

At only two schools is there farm machinery which is not commonly found on the poorest farms of the district. There are, of course, reasons for this, chief among which is the character of the farm; or in some instances the land is too rough for the employment of modern machinery. One noticeable thing about the farms is the lack of care of farm machinery.

Only four out of the nine schools have orchards. This lack of orchard facilities is a serious handicap to instruction in horticulture. Each school, however, has prepared different kinds of hotbeds and cold frames for the purpose of growing sweet potatoes, tomatoes, etc., for use on the farm as well as, in some cases, for commercial purposes. So far as the evidence goes, the hotbed work at the schools is a new enterprise. This is work that may be carried on successfully in any school where a qualified teacher of agriculture is provided. At three of the schools an attempt has been made to set out an orchard and at others pupils have been given practice in renovating the existing old orchard on the farm.

Summary on farm practice.—The school farm should be as good as any to be found in the district and land suited to the various farm crops and animals which can be produced in the district. The reasons for this are obvious. It should be the aim of the school to establish the highest of production—that is, it should undertake to show pupils what farming is at its best. Such a policy fits into the home-project idea of vocational agricultural instruction, because boys whose home farms are producing inferior crops and animals will have standards by which their home products may be gauged, and the improvements they make from year to year may be measured. High standards thus may become not discouraging but encouraging factors in the training of the pupils.

The school farm should not be a fancy farm—a farm where money is spent and not a farm where money is made—that is to say, the equipment should be modern and varied, but of the kind that the most practical farmer would choose. Such buildings as barns and poultry houses should be of the kind that a farmer with a moderate amount of capital would wish to erect as parts of a convenient, sanitary, and practical plant. Quarters for all kinds of live stock suited to the locality should be provided. The school might or might not own all of the live stock dealt with in classroom demonstrations. The best obtainable specimens of the breed studied should be seen and handled, and proper accommodations for keeping them should make it easy to borrow or hire animals when needed.

Little opportunity is provided for visiting fancy farms for purposes of observation. It is, therefore, highly desirable that these schools should provide the best models of buildings, implements, machines, and animals for use in economic and profitable production.

Use of school farm.—The principal practical use of the school farm has been to afford facilities for doing practical farm carpentry, such as making gates, hog houses, poultry houses, concrete forms for underground drainage, hotbeds, etc. Pupils have been given practice in pruning and spraying the school orchard, where it existed, running terraces, and inoculating hogs. Only in two schools was it found that the school farm was used for group project work, that is, where a certain number of pupils are given the problem of renovating the school orchard, caring for the hogs on the farm, and running the bean or tomato project, etc.

Only in those schools where pupils were enrolled in the vocational course in agriculture and without access to land were pupils given individual projects on the school farm. Thus, only 85 acres of the total number of acres in all the school farms have been used for individual supervised practical work in agriculture during the year. The conditions under which the schools are now operating enables the vocational pupils almost without exception to live at home and carry on their required supervised practical work in agriculture on the home farm.

With the exception of a very few pupils, all are required to do some kind of supervised practical work in agriculture on the home farm for at least six months. The same requirement is made of pupils in vocational departments in county schools, so that, with the limited number of landless pupils in the district schools, the school farms, so far as their use is concerned, are of little educational value.

The same practice is followed in these schools as is followed in the county high schools in utilizing the teaching materials in the community for class instruction in agriculture. For example, farms in the immediate vicinity of the school are used to teach pruning and

spraying of orchards, running terraces, inoculating hogs and cattle, building storage pits for sweet potatoes, treating wheat and oats for smut, etc.

Methods of teaching in the district agricultural schools.—All the schools are using the textbooks prescribed by the State. So far as agricultural instruction is concerned a seasonal sequence of topics in the book is followed rather than a logical sequence. The textbooks, therefore, in all the schools but two, are used mostly as references.

All reference books in agriculture required by the State board for vocational education and catalogued bulletins serve to supplement the textbook. These are used in connection with a systematic study of the supervised practical work which is outlined in advance by the teacher. The project study outline method of instruction is followed by six out of nine schools. This method of instruction compels the pupil to use rather extensively available reference materials.

Although the State board for vocational education has required each of these schools to secure certain illustrated materials for teaching purposes, it is evident from the inquiries and observations made that so far little use is made of such materials.

Virtually no attention has been given in the schools by the teachers to outlining in advance a series of practical laboratory exercises to be followed by the pupils. Some of the more progressive teachers have attempted to work out as the classes progress a series of exercises from different laboratory manuals.

Little attention has been given in these schools to this phase of instruction. This is probably one of the greatest weaknesses in the instruction, as planning instruction and practical work in field crops and soils lend themselves easily to a study of the biology of plants, including considerable agricultural botany, injurious insects and their control, implements and their use, plant foods, and feeding.

In connection with the instruction in animal husbandry splendid opportunity for correlation is afforded in relating the work to the biology of animals, problems of hygiene, sanitation, buildings, and equipment—kinds, cost, plans, etc.

All the schools are following the requirements of the State board for vocational education in keeping certain records, such as—

1. An agreement between the pupil and the parent relative to facilities for carrying out at least six months' supervised practical work at home.
2. Preliminary statement of vocational work, which lists the names of the boys enrolled in the vocational course, their ages, course of study pursued, the kind of project engaged in, and its scope.
3. A monthly report of methods of instruction to the State supervisor of agriculture.
4. Cash and labor records used by each pupil carrying on a supervised practical piece of work.
5. Summary of financial statement of the practical work at home.

These records are kept on file in good form at the school. Such records are common not only to the agricultural schools but also to all county high schools approved for Federal aid.

Summary of instruction.—So far as supervised practical instruction in agriculture is concerned, the methods of instruction by supervised visitation of home projects are uniform for both agricultural schools and for county high schools.

Lantern slides and charts, prepared by experts, lending themselves to vivid presentation of facts and principles of vital concern to practical farming are now available in great abundance. They may be bought or borrowed by any school; but they are not utilized by either agricultural schools or county high schools.

The principal of the agricultural school has control over all teachers and should see to it that methods of instruction are used which give each pupil a well-knit body of knowledge through the closest possible correlation of the subject studied with the interests and activities of efficient farming and well-balanced country life.

The agricultural school laboratories and shops should offer advantages superior to those of the county high school for group methods of instruction.

The supreme problem of this type of school is to adopt methods of instruction which shall insure model farming at the school, and at the same time make this a means to the best possible farming by its pupils at their own homes. In working out this problem the distant home must have equal consideration with the home that is near.

Extension work in the agricultural schools.—The schools have no organized relationships with the State agricultural work. The agricultural teacher in almost every school has for a very brief time assisted the county agent in organizing clubs. There is no attempt at using the agricultural teachers to supervise club work. As a rule, the agricultural teachers have a sufficient amount of work in connection with their regular vocational duties to keep themselves fully employed. Their work falls into three main divisions, some of which take on forms of extension work: (1) Regular class and laboratory instruction; (2) field work for observation and instructional purposes, such as pruning and spraying trees, home mixing of fertilizers, running terraces, treating cereals for smut, selection of seed; and (3) responding to demands made upon them by farmers for help in solving some of their troublesome problems. There seems to be no direct relationship between the agricultural school and the teaching of agriculture in the elementary schools of the county or district.

In two of the nine schools there was practically no cooperation with the farmers of the community. In the other seven schools the agricultural teachers have been called upon, more or less, by farmers to assist them with some of their problems. The school farm is used

to some extent to carry out practical farm demonstrations in small grains, cotton, and truck crops. Some of the schools have been instrumental in bringing about fall plowing, the growing of cover crops, furnishing the farmers with bulletins, inoculating hogs, buying fertilizer and seed cooperatively, and renovating orchards. All this work applies to the immediate community in which the schools are located and is work which any vocational department of agriculture in a public high school may perform.

In a few places the county agent works through the school in the promotion of clubs and in their general county-agent work. There is, however, no organized machinery for systematic cooperative relationships between the school farm, the agricultural teacher, and the county agent.

In only one school was there any indication of cooperation between the school and the farmers' organizations, and in this case the agricultural teacher is president of the Swine Breeders & Live Stock Association. By this means the school has been instrumental in introducing better types and breeds of live stock into the community.

The broad obligations of the district agricultural schools, with reference to the work of their agricultural activities, should be as follows: Members of the school staff and especially the agricultural teachers, working in cooperation with the county agents, should investigate farm and market conditions for the purpose of advising individuals and organizations with reference to better business methods among the farmers and more satisfactory methods of marketing farm products. They should also give instruction in the organization of cooperative enterprises, and should perform any other work calculated to promote the agricultural or rural development of the territory represented by the school. It should be the duty of the school staff to keep in touch with and to bring to their assistance all agencies in the State or Nation that would enable them to utilize the latest and best knowledge in the furtherance of their work.

Agricultural instructors: Their qualifications.—The prevailing standard qualification for agricultural teachers in these schools is graduation from a four-year agricultural course in a State agricultural college. In view of the foregoing discussion of the courses of study and the function of the district agricultural school it will be evident that its teaching staff should be radically different from the staff of a county high school. The county high school has a two-fold aim, in that it admits some pupils whose life purpose is farming, and other pupils with various other purposes; whereas the agricultural school should admit only those who desire to prepare themselves for better farming. Just here is where the agricultural schools and the county high schools are overlapping, as their aim at

the present time is one and the same. Nevertheless, the qualifications of the vocational teacher of agriculture in a county high school are of the same general nature as those of the vocational teachers of agricultural projects and related studies in an agricultural school.

Administration of the agricultural schools.—In three of the agricultural schools the principal is also vocational teacher of agriculture. In all nine schools the principal is manager of the school farm. In six schools the agricultural teacher has no responsibility for the farm. He acts only in an advisory capacity to the principal. On the contrary, the principal should be selected because of special qualifications for service as adviser to the board of control in the administration of the type of education the school represents; and the vocational teacher of agriculture should be chosen because of his appreciation of the requirements of vocational education, and his special qualifications for bringing education to bear on the training of pupils for school and home farm work.

The principal is responsible for all instruction given, and the efficient conduct of the school, and for making the records and reports required by the board of control as well as for records and reports required by the State board for vocational education. The latter is a new requirement.

The State provides a competent State supervisor of vocational agriculture. It is the duty of this supervisor to assist teachers to improve their methods of instruction and to organize their material for teaching purposes. He prepares outlines and publications bearing directly upon methods and materials on instruction in vocational agriculture. He also brings the teachers together from time to time for conferences. The same provision should be made for supervising nonvocational subjects.

The schools are conducted directly by the executive committee of the State high-school commission. The local people look upon the schools as State schools and refer to the farms as State farms. With very few exceptions the local community manifests little interest in agricultural schools except as schools adapted to furnish general high-school education. In no case does it appear that the county superintendent has established any direct relationship with these schools for educational purposes.

Summary of agricultural schools.—There are nine agricultural schools in Alabama, with two of these schools in the seventh congressional district. The law establishing the schools was passed on February 28, 1889. Entrance is based on completion of a 7-year elementary school course. All schools admit students from outside of their respective districts. About 8 per cent of the pupils board at the school, and are, as a rule, from 1 to 3 years older than pupils in corresponding classes in town high schools. The course of study covers a

period of 4 years of 9 months each. The schools are coeducational. There is no age limit for admittance. Each school receives support from the State in the sum of \$4,500 a year. The total income for 1918 from all sources was \$67,536 for all the schools.

The number of acres used for instruction is approximately 85.

Farm animals included 17 mules, 2 horses, 6 cows, 67 hogs, 52 fowls, 3 bulls, and 1 calf.

Board, room, light, and heat cost each student from \$16 to \$20 a month in private homes, and from \$10 to \$12 in schools with dormitory facilities, where the farms supply the dormitories with farm produce.

Books cost from \$10 to \$12 a year for each pupil.

Productive labor is not required of pupils except in two schools. Students, however, find opportunities for work at 15 to 20 cents an hour.

Military training is not a feature of any of the schools.

Piano instruction is available in practically all of the schools. Every girl is required to take one year's work in agriculture and four years' work in home economics.

Little attention is given to purchase of registered stock to improve the school stock and to service to the farm community.

Few of the schools rely upon their shops for repairing, plumbing, wiring, carpentry, and concrete construction, and other needed work. Where the opposite policy is followed the shop work grows primarily out of the needs of the school and teaches the boys to be self reliant on their own farms.

Six of the agricultural schools not functioning in the State system.—1. At Athens the school is in competition with a private boarding school for boys; the farm is rented, and therefore of little practical use as an educational factor; the school lacks facilities for correlated science work and has not reached the rural people except in a small way, and that only in the county in which the school is located.

2. The school at Jackson is in no sense adapted to the needs of rural people. Investigation shows that time never was when the people of this district showed any interest in this school. The equipment is very inadequate for carrying on the work, and in the past the local people have been opposed to the agricultural teacher working with the surrounding farming communities.

3. At Abbeville the work is at a very low ebb, due to lack of interest on the part of the town and countryside. It is common talk about Abbeville that the local people have no interest in this kind of education. It was reported that a physician is interested in seeing the work discontinued, so that the building might be used as a hospital. An interview with a patron, and for a long time the agricultural teacher

in this school, shows that the agricultural side of the school is not functioning in the promotion of agricultural education in the county or district.

4. A glance at the course of study offered by the agricultural school at Sylacauga shows that the school is not designed to prepare young people for rural life. The school is located in makeshift quarters and in a town sufficiently large and prosperous to have a good high school of its own, together with a vocational department of agriculture if the local people so desired. There is practically no provision at the school for correlated science work. The farm equipment, including buildings, is very inadequate.

5. The school at Wetumpka is a town school, located geographically in the wrong place. The school has never been anything but a local school. There is little excuse for continuing to aid it as an agricultural school, as it is neither congressional in its representation of students, nor agricultural in its organization and equipment.

6. The school at Evergreen has a poor plant and only a few acres of land. The equipment likewise is indifferent. This school is at the present time accomplishing good work in spite of these handicaps because it is in charge of an efficient principal. This, however, is probably a passing condition and may be considered as giving the school a new lease on life; but it can not become permanent because the school lacks all material equipment necessary in a well-equipped agricultural school.

Three satisfactory agricultural schools.—(1) On the contrary, the school at Hamilton has been unique in its work among similar schools in the United States. It has throughout a number of years selected the most promising boys of the country and set them on their way to better farming and to higher education in agriculture. This school has a record which is enviable among schools of this type in the United States. The school building is evidence of large interests on the part of this district in this type of educational work. The enrollment of boys has been most satisfactory.

(2) The school at Albertville is unique in its location on Sand Mountain. The enrollment of boys and the provision for instruction in agriculture in this school, as well as the interest manifested in the school by the people, is sufficient reason for this type of work in this section of the State.

(3) Investigation shows that no section of the State is in greater need of an agricultural school than is the section in which is located the agricultural school at Blountsville. Although the school buildings have recently been burned to the ground, the local people of the district have rallied to its support in a most remarkable way. They have given their personal notes for large sums to replace the school and to continue the work. The spirit of the people in this section

of the State is of the right kind for the development of an agricultural school of less than college grade.

What the Alabama agricultural schools ought to be.—The agricultural schools of Alabama should be planned to meet the real needs of the people to furnish a practical education to all young people of whatever degree of preparation for at least a six-months term. The schools should not be planned as preparatory schools for the university or the agricultural college. They should be well equipped and have not less than 150 acres of good agricultural land each. They should be well stocked with cattle, mules, and horses, and have such other stock as would meet the needs of the school's particular section of the State. The schools should plan their work for 12 months of the year, making provision for two six-month terms. Young men and women of ability should be enabled to pay a good part of their expenses at these schools by the labor of their own hands, and so prepare to go back to the land in Alabama with a technical and practical knowledge of farming, such as is not now procured in the district agricultural schools.

If the Alabama agricultural schools were reorganized on this new foundation, they could no longer, as now, be utilized as local high schools; neither would they in any sense compete with the county high schools.

The committee is convinced that the State should maintain six agricultural schools at a cost to the State of not less than \$20,000 per annum for each school. The six schools should be located or re-located by the present board of control of these schools or the executive committee of the present agricultural schools. It is understood, of course, that the present schools as well as new sites may be considered by the locating board. The essential thing is to locate the six proposed schools at strategic centers over the State.

II. THE COUNTY HIGH SCHOOLS.

History of organization.—Up to the year 1907 there were no public high schools in the State except as attempts had been made to evolve them here and there as a part of the school system of various cities. There had been and were then successful high schools in portions of the State, but they were private or denominational. A boy or girl living in the country, or in any except a few of the larger towns, had to secure high-school training in private schools.

The State Assembly of August 7, 1907, passed a law which made possible the establishment of a high school in each county of the State. Under this law, a high-school commission, consisting of the governor, the State auditor, and State superintendent of education, was appointed to locate the schools.

The minimum requirement as a condition precedent to the establishment of a county high school has hitherto been five acres of land

and buildings with a valuation of not less than \$10,000. These high schools receive an annual appropriation from the State of \$3,000, and additional funds for maintenance from county boards of revenue and from an enrollment fee of \$2.50 per pupil for each half year.

In order to qualify for Federal aid for vocational agricultural instruction the State board for vocational education has required each school to make available 10 acres of land for school project work, to provide a classroom with agricultural laboratory equipment worth \$300, and an annual sum of \$50 for maintenance. The agricultural teacher must meet certain requirements in training and experience, and if he devotes his whole time to teaching vocational agriculture the school is reimbursed for half of his salary from Federal funds.

Teaching staff of the county high schools.—The minimum number of teachers employed in any county high school is three; but the number is largely determined by the income of the given school. For example, the Jefferson County high school has a staff of 10, all of whom are college graduates. The returns on the questionnaire for these schools showed a higher average training of the faculty in the county high schools than in the agricultural schools. The salaries of the teachers range from \$540 to \$2,400. The average salary of teachers of academic subjects in the county high schools is slightly above that of the agricultural schools.

Vocational departments of agriculture.—This new work of the county high school enables it to orient its work more definitely with agriculture, the principal industry of the State. The teacher of vocational agriculture is chosen because of his liking for country life, his demonstrated ability in practical farming, his salutary influence upon boys and young men 14 to 25 years of age, and his special qualifications for teaching and supervising practical farm work.

The instructor of agriculture is responsible for the conduct and efficient agricultural training of the pupils in his department. The agricultural instructor at present is permitted to teach two periods a day, on an average, of nonagricultural subjects.

The general influence of the vocational department of agriculture in the county would be materially increased by the appointment of an advisory committee composed of practical farmers from the school community.

Enrollment in the county high schools.—Another page gives a comparative statement of the enrollment in the county high schools and the district agricultural schools.

These schools are organized as county schools, although in most cases they draw students from two to five different counties. This is especially true of the county high schools which offer instruction in vocational agriculture.

How the county high schools are located.—The problem of locating a county high school is much simpler than the problem of locating an agricultural school. This will be evident from the following considerations: County high schools have flourished best wherever they have been most successfully identified with the agricultural interests of the county and wherever they are easily accessible by reason of good country roads. The State board for vocational education requires that each county high school provide 10 acres of land in order to qualify for Federal aid for agricultural instruction. The investigation goes to show that 10 acres of land is a handicap or liability rather than an asset in the development of vocational work. This is true because 10 acres of land, or 5 acres of land, is of no value to the school unless there are means provided for the operation and management of the land. Schools that depend upon local farmers to assist in the work of the school farm have failed. There is no place for a school farm unless the school provides adequate facilities for working the land.

Under the operation of the Federal act for vocational education the practical work in agriculture by pupils may be studied at the school and put into practice at their own homes or at the homes of other practical farmers in the vicinity of the school. Illustrative material and practice work may also be found at neighboring farms.

One high school has a poultry plant, and the agricultural department makes good use of it. Another has a greenhouse, which is operated by the vocational pupils without any assistance from local farmers.

Equipment of the county high schools.—One might expect a radical difference in the requirements for equipment in county high schools and the agricultural schools; but, as a matter of fact, so far as laboratory equipment for vocational work in agriculture is concerned, they are the same.

The school farm.—Unless the present 10 acres required by the State board for vocational education are utilized to better advantage than at present, the requirement might just as well be eliminated altogether. The reasons for this are that farm products, methods of production, farm buildings, and equipment may be studied on farms in the vicinity and at the homes of the pupils. Though a high school may have a greenhouse and its agricultural department make good use of it, it is quite possible to give excellent instruction without any greenhouse at the school, if cooperative relations are established with owners of greenhouses in a section where market gardening is an important branch of farming.

Practice work under economic conditions is proving better than practice work under school conditions, provided the practice work in the former case is given proper educational value by study at the school, in the greenhouse, and elsewhere, of all factors involved in

the production and marketing of greenhouse crops. The same principle applies to growing plants other than those grown in greenhouses. Efforts are being made at some of the schools to grow fruit trees on the school premises, in charge of the pupils in the vocational department. These trees will afford practice work from season to season in connection with the various processes of propagation, pruning, spraying, thinning, picking, packing, and marketing. Fruit growers, live-stock growers, and general farmers, however, are willing to cooperate with the agricultural instructors in affording pupils practice work.

The vocational department of the Walker County high school is working in cooperation with a project located near the school grounds. The aim of the project is to grow plants for the market. One thousand five hundred bushels of sweet potatoes are to be bedded this season by the pupils of the high school. From these it is expected to grow approximately 12 to 15 million potato plants, which will be pulled and marketed largely by the pupils of the school. This project is operated on a commercial scale for the purpose of securing funds with which to purchase libraries for the schools in the county. Similar work will be conducted in connection with tomatoes, beans, etc.

Jefferson County high school is provided with a good farm and good equipment. It has secured pure-bred live stock from Wisconsin and is in a position now to do creditable instruction in live-stock management.

The courses of study.—The courses of study in the county high schools have been outlined briefly by the department of education. They cover four-year courses in agriculture, Latin, modern languages, and general science. There has been no attempt at adapting the four-year course in agriculture to the needs of part-time pupils in day classes and to the needs of adults in evening classes. The vocational course in agriculture is identical with the course given in the agricultural schools.

Substitutes for home projects are accepted for boys who have had no farm experience. These boys, for example, may be employed on dairy farms, with the privilege of attending dairy classes and keeping records of one or more cows or one or more crops. Dairy projects and substitutes for projects rarely occupy the entire work time of the pupils.

Farm shop work is required in the county high schools as well as in the agricultural schools. Hotbeds, cold frames, farm gates, poultry houses, and brooders are made. The agricultural instructors teach the boys a variety of projects in farm shop work. The success of this phase of the pupils' training depends in no small degree on the mechanical skill and ingenuity of the agricultural instructor.

A healthy indication that the county high schools are becoming genuine rural high schools is that the largest enrollment of pupils

is in the science course, with the enrollment in the vocational course as second.

The study shows that the county high schools maintain school gardens in which students of the general science course do all the work of preparing the soil and growing the crops. The school gardens grow all the common varieties of vegetables and, in some cases, many varieties of flowers and shrubs. This is real seventh-grade work. The advantages of the school garden may be briefly indicated as follows: (1) It offers relief from the routine of the schoolroom and keeps the pupil in the fresh air and sunlight; (2) it teaches, in connection with class and laboratory instruction the composition and care of soil, the best conditions of plant life, the value of fertilizers, seed selection, etc.; (3) it develops the sense of ownership and respect for property—in the care of their own plots pupils fight common-plant enemies and learn that a noxious weed and a neglected plot may make trouble for others; and (4) it promotes a pleasant avenue of communication between the school and the home, relating them in a new and living way; thereby strengthening the public interest in the school.

Forms of community service.—A limited number of returned questionnaires indicate the ways in which the agricultural teachers of the county high schools serve rural communities. They are—

1. Spraying home orchards and pruning trees of patrons and other farmers.
2. Assisting in planting of cover crops for harvesting, for grazing, and for green manure.
3. Assisting in enlarging the enrollment of the school through the agricultural department.
4. Assisting in beautifying the grounds and campus.
5. Assisting in supervising the home project work of his pupils.
6. Advising the farmers of the community with their crops, fertilizers, insect pests, crop rotations, etc.
7. Cooperating with the farm demonstration agent and the home demonstration agent.

The county high schools are established to care for all the people. Yet there is little evidence to prove that they accomplish this end, outside of the vocational instruction in agriculture. The schools should perform a work broader and more far-reaching than the mere hearing of recitations. All classes of citizens should be reached and served by them in some way. In order that these schools might be made to function as real rural high schools for the county they should engage in one or more of the following extension activities:

1. *Social.*—Without seeming to meddle, the principal can be influential in procuring the best lectures and entertainments for the town lyceum course; that wholesome educational pictures are secured by the local movies; and that no public event shall pass without serving to promote the general educational interests of the community.

2. *Vocational.*—County teachers' meetings may be held at regular times in the school buildings to promote professional training. The teachers of these schools should pay frequent visits to rural schools, and give demonstrations of work important to both pupils and patrons. The entire resources of the school should be used to improve education in the county. Such activities as home gardening, milk testing, canning on the home premises, inoculating hogs against cholera, live stock judging, the spraying of trees, incubating, and other work with poultry, and supervised work in agriculture at home will bring school life and home and business life into closer union. This work can be made more successful by securing the definite cooperation of rural teachers. One rural school might concentrate its activities upon home gardening, another upon farm carpentry, another upon domestic science and domestic arts.

3. *Health and sanitation.*—It is especially suggested that the county high schools provide the country schools with lectures on such topics as Prevention of Diseases, Causes of Typhoid, Care of the Teeth, Cleanliness in Home and Town, etc. The class work in sanitation should be so practical and the sanitary conditions of the school grounds should be such that the conditions at home, in public buildings, and on the streets would be improved. These schools can improve local conditions through clubs, organizations for community beautification, and general sanitary improvement. An organized campaign against the house fly, more sanitary stores, streets, and yards may well start in one of these schools.

Summary of comments.—Attention should be given to strengthening the course in agriculture given in the seventh grade, where this grade is included in the county high schools. This may be done by securing seventh grade teachers who have had special work in agriculture and nature study. The vocational teacher of agriculture will always be in a position to assist the seventh grade teacher in outlining the work in nature study and agriculture and to teach, from time to time, lessons in agriculture and to organize the boys of the seventh grade into junior home project work. By thus strengthening the seventh grade work in agriculture, agriculture can be dropped as a requirement in the science course, and all pupils in the county high school should be required either to take the vocational course in agriculture or no agricultural instruction at all.

In the place of agriculture in the science course as it now stands the first year should be given to general science, the second year to biology, the third year to physics, and the fourth year to chemistry.

The qualifications set by the State board for vocational education for vocational teachers in county high schools are identical with those of the vocational teachers in the agricultural schools. All must be

graduates of a four-year college course in agriculture with several years of farm experience, together with good requirements in professional improvement.

Specialization among vocational teachers of agriculture in county high schools is only possible where the enrollment is large enough to require two or more instructors. As conditions now exist, choice among candidates rests with the man who is qualified to teach the major agricultural subjects in the four-year course as outlined by the department of education. Experience has proved that it is possible to find a few capable instructors of this type. Not college boys but men of maturity are demanded. Now and then a mature man who is not an agricultural graduate, but who has developed the right kind of talent, both in the sense of his practical farming and in his powers of presenting ideas in connection with farming, may qualify for an instructorship in part-time and evening class work.

For the first time there will be a special summer course this summer at the Alabama Polytechnic Institute for preparation of agricultural teachers in service. This summer work will include technical instruction in agriculture and shop work, together with special courses in methods of teaching vocational agriculture in high schools. This kind of preparation is probably most needed by agricultural teachers in service at the present time.

Specific recommendations.—A casual reading of this section shows that the district agricultural schools are not living up to the specific work for which they were established. They are, as a matter of fact, serving in exactly the same capacity as are the county high schools. It is, therefore, recommended that these schools be disposed of in the following manner:

1. Maintain hereafter only six agricultural schools of secondary rank, to be located at strategic centers over the State as a whole, which location may be at present schools or at new sites.

2. Give these schools an annual State support of not less than \$20,000 per annum for each school and reorganize them as genuine secondary agricultural schools.

3. The State aid to county high schools should be increased to a minimum of \$4,000, provided that no such school shall hereafter receive any aid from the State which is not duplicated dollar for dollar from county or local funds. More than \$8,000 a year is needed to make these schools strong and effective county high schools.

4. While of no immediate bearing on the other State-supported district agricultural schools and county high schools discussed in the present chapter, it is recommended here that the annual State appropriation to the Northeast Alabama Agricultural Institute, at Lineville, be discontinued and the school property turned back to the local community. This is so recommended because the school is purely local and in no sense serves the State.

Chapter XII.

THE CITY SCHOOLS OF ALABAMA.

Definition of city schools.—A city in the State of Alabama is an incorporated town having 2,000 or more inhabitants. It was so defined by the supreme court some years ago, and the definition has been accepted for the purposes of the State school law. A town may at any time take its own census to determine whether or not it is entitled to this classification.

Under this definition there are 46 cities in Alabama. Each one of these was personally visited and its schools inspected by one or more members of the survey committee. The cities differ largely in size, industry, environment, and rate of growth.

Birmingham for example has 200,000 inhabitants and employs 621 teachers, while Bridgeport, at the entrance to Sequachee Valley, has but five white teachers and one colored.

The diversity in the rate of growth of these cities is an element very materially affecting conditions in the schools. Birmingham led most of the cities of the country in the percentage of increase in its population between 1900 and 1910, as shown by the census figures of those years. In Sheffield, and in Anniston, the population has more than doubled within the past two years, due largely to governmental activities during the war, while in several other cities there has been very rapid growth. Quite naturally, it has been hard for these cities to increase their school buildings and school revenue in such manner as to keep pace with this rapid increase in population. On the other hand, the superintendent of schools in one city lives all alone in a large brick building which a receding boom left without other occupants.

It may be observed in passing that there are a number of places in Alabama not classified as cities although they have more inhabitants than many of the places already so classified. Fairfield, for instance, is said to have 9,000 inhabitants. Muscle Shoals has perhaps 20,000 people in its district, but it is organized as a Government ordinance reservation, with schools in no way under State control. Numerous mill and factory districts do not incorporate as cities, although they have the necessary number of people. In most instances, the object seems to be either to evade taxation or to avoid State control.

City school boards.—The cities of the State differ as much in the efficiency and equipment of their schools as they do in size, industries, environment, or rate of growth. The relation of the cities to the State in school matters, however, is largely the same. Birmingham, Mobile, and Montgomery, have largely the same relationship to the State school system as have Prattville, Bridgeport, or Sylacauga. In each instance city school affairs are entrusted to a school board of five members, appointed by the city commissioners, if the city is under the commission form of government, or by the mayor and aldermen, if that form of government prevails. They are appointed from the city at large for a term of five years, the term of one member expiring at the end of each year.

While the law in the case is the same for all cities, in practice there are several modifications. Part of them are caused by special charters and some are merely matters of practice. For instance, the city of Mobile is by charter coincident in territory with the county of Mobile, so far as schools are concerned. Its county board and its city board are one and the same.

Prattville, one of the smallest cities in the State, has the largest school board, the number of its members being 18. This arises from the fact that the city school there is an outgrowth of the old academy, as in many other places in the South. The academy had a board of 13 members, the places being filled by heredity. When the building passed into the control of the city, 5 new members were added. The other 13 continue to hold office with the principle of heredity still in force. These 18 men are said to meet regularly twice each year. Similarly, Selma has a self-perpetuating board of 11 members. Several cities have a quasi official board of colored members for their colored schools. Bridgeport, on the other hand, reports no school board at all. School affairs are administered directly by the city aldermen, with the mayor as president.

Wide diversity exists as to school-board practices. In the larger places the board meets regularly each month and keeps systematic records of proceedings. In some smaller places they seldom meet and appear to keep no minutes whatever.

Under the Alabama State law the city board of education has very little real authority. It can elect a superintendent and teachers, and regulate the internal workings of the school if it so desires, but beyond this it can do little. The course of study is prescribed by the State. Most of the textbooks in the elementary schools are prescribed by the State textbook board, and are uniform throughout the State. The city board gets its State and county money from the county board and its city money through the city commissioners. It can not buy a school site or erect a school building without obtaining the consent of the city commissioners.

These limitations will be discussed more fully under separate headings. However, the committee very strongly recommends that the State law should be so changed as to very greatly increase the powers and duties of city school boards. Specific recommendations on this subject are made elsewhere.

City school finances.—The financial support of city schools in Alabama comes from the following sources:

1. The State school fund.
2. The county school fund.
3. The general city tax.
4. The special city school tax.
5. Fees charged for attendance upon school, variously designated as tuition, matriculation, or incidental fees.
6. Subscriptions or other gifts made by patrons or other friends of the schools.

Taking these in their order, the following explanations may be made:

1. *The State school fund* consists chiefly of what is known as the 3-mill tax, supplemented by certain miscellaneous funds and by certain special appropriations made by the State legislature, amounting ordinarily to about \$500,000 each year. The State superintendent apportions this fund to the various county boards of education upon a strictly per capita basis of census enumeration of children, including white and black alike. The county boards of education in turn apportion the money between the county schools and the cities. The law makes it the duty of these boards to so distribute these funds that the districts "may have a school term of approximately the same length."

This leaves to the county boards of education considerable latitude as to this redistribution. As a result, practices differ widely in the different counties. Some boards distribute these funds on a per capita basis as shown by the school census enumeration. If they see fit, they may distribute it upon the basis of total net enrollment in the schools, or on the basis of average daily attendance. In some cases they appear to make merely the best guess they can as to what distribution will best answer the purposes of the law. It is sometimes stated that they "give the county schools what they need or must have, and the city schools what is left." In Montgomery County, on the other hand, the county board gives to the city board the State fund on a per capita basis of census enumeration and in addition gives it half the county fund. The very uncertainty of this process tends to bring city board and county board into antagonism and to increase mutual suspicion.

In any event, the distribution is left to the discretion of the county board. The city board may present its claims and may argue its

case, but in the end it must take what the county board gives it. However greatly the county board may desire to do the best thing, there is always the possibility that it may change its mind as to what that is. As a result, the city board has no way to tell from year to year what amount it will receive from the State. Even when the time comes to make contract with the teachers for the coming year, the city board is still unable to find out even approximately how much money it will receive from the State. The disadvantages of this situation are obvious.

2. *The county school fund* consists of the proceeds of a tax which may be levied for school purposes by vote of the people on the assessed valuation of all the property in the county up to 4 mills. Of this amount, a 1 mill tax may be levied by a three-fifths vote of the people and a 3 mill tax by majority vote. This sum is supplemented by poll taxes, dog taxes, and certain other funds. The entire county school tax goes into the hands of the county school board and is distributed by them. The distribution of this fund is left to the discretion of the county board, just as is the distribution of the State fund, and is attended with the same difficulties and the same degree of uncertainty.

3. Each city in the State may by vote of its citizens levy a *general city tax* up to 5 mills, for general city purposes, including those of the schools. From this the city commissioners may give to the school whatever sum they desire to give or feel that they can spare for school purposes after the other expenses of the city government have been met. Gadsden by special charter levies a 10 mill tax, of which $2\frac{1}{2}$ mills must be placed to the credit of the school fund.

The following table is based on the State superintendent's report for the year 1917-18 and shows the amount of money which the cities of the State expended upon their city schools, with the per capita of such expenditure for every pupil enrolled during the year and also for each pupil in average daily attendance:

TABLE 42.—Expenditures by the cities for schools.

Cities.	Total net enrollment.	Average attendance.	Total cost of maintenance.	Cost per capita on enrollment.	Cost per capita based on average daily attendance.
Alabama City.....	1,180	615	\$10,915	\$8.64	\$16.57
Albany.....	1,562	974	24,813	15.76	25.26
Alexander City.....	785	460	9,810	13.35	21.33
Andalusia.....	720	551	11,231	15.60	20.38
Anniston.....	3,480	2,410	38,714	11.12	16.06
Atmore.....					
Attalla.....	728	310	8,631	11.86	27.84
Bessemer.....	4,100	2,524	59,832	14.59	23.70
Birmingham.....	30,287	20,977	623,980	20.60	29.75
Brewton.....	578	563	9,083	15.74	18.13
Bridgeport.....	360	143	2,833	17.87	19.80
Cullman.....	562	400	8,082	18.00	20.00

¹ Not listed as city, 1916-17.

² Figures for 1916-17.

TABLE 42.—Expenditures by cities for schools—Continued.

Cities.	Total net enrollment.	Average attendance.	Total cost of maintenance.	Cost per capita on enrollment.	Cost per capita based on average daily attendance.
Decatur.....	717	585	\$13,392	\$18.67	\$22.89
Demopolis.....	538	463	10,185	18.92	22.00
Dothan.....	1,622	1,092	27,731	17.09	25.40
Enterprise.....	498	379	5,500	11.04	14.51
Eufaula.....	722	400	8,940	12.39	20.32
Florala.....	524	269	6,987	13.33	25.96
Florine.....	1,445	640	16,903	11.76	26.56
Gadsden.....	2,794	1,768	34,611	12.38	19.57
Grady.....	679	386	10,118	14.90	26.22
Greensboro.....	291	215	5,203	17.57	24.20
Greenville.....	580	457	9,039	15.57	20.84
Huntsville.....	1,518	1,035	27,535	16.85	24.86
Jacksonville.....	318	211	5,542	17.42	26.26
Jasper.....	649	402	8,719	13.43	21.68
Lanett.....	1,527	1,180	22,165	14.51	18.78
Marion.....	324	222	6,998	21.60	31.52
Mobile.....	7,339	5,390	209,100	28.49	38.79
Montgomery.....	6,151	4,710	127,270	20.69	27.92
Opelika.....	902	629	16,461	18.25	26.17
Ozark.....	634	480	7,705	12.15	16.05
Phoenix.....	501	341	6,702	13.29	19.66
Piedmont.....	450	285	6,489	14.42	22.77
Prattville.....	672	562	6,452	9.60	11.48
Roanoke.....	929	576	11,907	12.81	20.67
Russellville.....	308	219	4,017	13.04	18.34
Selma.....	2,221	1,708	45,709	20.60	26.79
Sheffield.....	1,002	716	10,848	10.83	15.15
Sylacauga.....	478	278	5,353	11.20	19.25
Talladega.....	1,155	793	16,599	14.36	20.93
Troy.....	1,250	720	22,662	18.13	31.21
Tuscaloosa.....	2,363	1,411	39,195	16.58	27.78
Tusculum.....	781	597	11,279	14.44	18.89
Tuskegee.....	342	216	5,110	14.85	23.66
Union Springs.....	497	345	11,572	22.88	32.87
Total.....	86,956	61,687	1,589,104	18.27	24.74

* Includes a bond of about \$50,000.

4. Each city may by vote of its citizens levy a *special city tax* up to 3 mills to be used exclusively for city school purposes. This, however, can not be done until after the county has already voted upon itself a county school tax of 3 mills. The purpose of this latter restriction is evident. It was designed to prevent a wealthy district in the county from voting upon itself a tax adequate to support its own schools and then voting down the county tax in which the rural schools would share. It would be quite possible, however, for a city to vote for the county tax and yet have this tax defeated by the voters of the rural districts. In Autauga County this actually happened. In such an event the city is deprived of the privilege of taxing itself for the support of its own schools. Incidentally, it may be noted that when a city desires to vote upon taxing itself for school purposes, it is the county board of revenue that must call the election.

According to records in the office of the State superintendent of education up to October 1, 1918, only 6 out of the 46 cities in the State have availed themselves of this privilege of levying a special city school tax. Some others have voted the tax since that time, and a few others have called elections. The smallness of this number is significant. Some reasons for it will be discussed later.

5. It is the common practice in the smaller cities of Alabama to charge the children who attend the schools certain fees for that privilege, variously known as *matriculation, incidental, or tuition fees*. These names appear to designate differences in amount rather than differences in principle. Some cities distinguish between that portion of the school year known as the "free term" and that known as the "pay term." For the former they charge "matriculation fees" and for the latter "tuition fees." The term incidental fee seems to signify that, while no charge is made for the instruction, there is a charge for the supplies, the janitor service, etc. Sometimes the fees charged apply only to high-school pupils, but usually to all pupils. Sometimes they apply to only a portion of the term, but more frequently to the entire term, including the period of compulsory attendance. These fees range in amount from the "nominal fee" of \$1 per term to the considerable amount of \$5 per month charged in some high schools.

Table 2 shows the total amount received by each city in Alabama during the school year 1917-18, as shown in the State superintendent's annual report for that year, with the amount of tuition fees collected by the school, and the percentage of such amount upon the total school receipts for the year.

TABLE 43.—Total amounts received by cities for school purposes—Tuition fees.

Cities.	Total receipts.	Receipts from pupils' tuition.	Ratio of tuition to total receipts.	Cities.	Total receipts.	Receipts from pupils' tuition.	Ratio of tuition to total receipts.
			Per cent.				Per cent.
Alabama City.....	\$10,195			Huntsville.....	\$27,735	\$ 4,190	15
Albany.....	24,888	\$9,052	36	Jacksonville.....	5,542	642	12
Alexander City.....	10,702	3,148	29	Jasper.....	8,754	3,214	38
Andalusia.....	12,371	1,663	13	Lanett.....	25,665		
Anniston.....	33,564	5,416	14	Marion.....	6,998	972	14
Atmore.....				Mobile.....	215,310	10,611	5
Attala.....	9,648	2,320	25	Montgomery.....	146,139	567	4
Bessemer.....	86,918	380	44	Opelika.....	16,491	3,271	20
Birmingham.....	672,918	2,490	37	Ozark.....	7,775	3,400	44
Repton.....	9,083	2,090	22	Phenix.....	6,702	2,070	31
Bridgeport.....	3,433			Piedmont.....	6,489	770	12
Cullman.....	6,082	1,171	14	Prairieville.....	6,452	1,554	24
Decatur.....	15,737	1,240	8	Ranoke.....	14,071	5,011	36
Demonopolis.....	10,185	435	4	Russellville.....	4,017	1,617	40
Dothan.....	27,731	11,677	42	Selma.....	45,881	7,480	16
Enterprise.....	5,500	2,300	42	Sheffield.....	11,690	87	75
Eufaula.....	9,025	1,500	17	Sylacauga.....	5,353	1,897	35
Florala.....	7,285	937	13	Talladega.....	16,715		
Florence.....	17,233	2,473	14	Troy.....	60,162		
Gadsden.....	85,442	1,491	4	Tuscaloosa.....	40,209	10,169	25
Girard.....	10,118	1,537	15	Tusculumbia.....	11,679		
Greensboro.....	5,208	1,883	36	Tuskegee.....	5,110	1,190	23
Greenville.....	9,039	2,314	26	Union Springs.....	11,409		

¹ Not listed as city in 1917-18.

² Data for 1916-17.

6. Sometimes when public funds are not available in sufficient quantities, the people interested in the school will make *subscriptions of money* to be used in supplementing the public funds. In some instances, buildings have been erected through the generosity of individuals or corporations. So long as private funds are used

wholly for public purposes, and so long as they are not depended upon to take the place of public funds, but only to supplement them, they are actually helpful to the educational interests of the community.

Some underlying principles.—Whatever differences of opinion there may be in regard to the best method of distributing public funds for public schools, the following general principles would seem to be self-evident:

1. All children, whether in city or country, should have equal opportunity for education.
2. State or National aid should be apportioned to communities in such a way as to encourage the communities to do as much as they can for themselves. It should not be applied in such a way as to pauperize the community or to penalize it for helping itself.
3. There should be at least a reasonable degree of certainty in regard to the distribution of school funds. It is better to have a definite, even though a small amount of money, than to have the mere possibility of obtaining a larger sum.
4. Every child of school age in the State is entitled to receive free of any charge such instruction as is suited to his age and development.
5. The State should adopt a definite policy with reference to the education of Negro children and the apportionment of funds for them.

Application of these principles.—While these general principles would seem to be so clear as to be self-evident, the application of them in a just and equitable manner may not be so clear. The following suggestions are made by way of application of these principles:

1. The method of apportioning State school funds is a State-wide question and is dealt with elsewhere. The method of distribution should in the first place be definite and clear-cut and should not be left merely to the judgment of the county board or any other official body, no matter how honest or how intelligent.
2. As to the principle that State or National aid should be applied in such a way as to encourage communities to do the most they can for themselves, it is obvious that in many instances the present practice works in exactly the opposite way. The real reason why only 6 out of the 46 cities of the State had last October availed themselves of the privilege of taxing themselves for the special support of their schools was that in some instances cities feared that if they taxed themselves the amount of State and county money received would be reduced or withdrawn altogether. Whether or not their fears were well grounded, it is at least undeniable that county boards could reduce or withdraw these funds should they see fit to do so. This

is now done in one case. In other words, a city progressive enough to tax itself for the support of its own schools was penalized by having State and county aid withdrawn or reduced.

3. As to the matter of uncertainty concerning the amount of school funds available, it may be pointed out that there is absolutely not one dollar which the city board of education may count upon as available for running its schools without first appealing to some other official body. The city school board receives from State and county school funds only such amount as the county boards see fit or deem wise to give. Before they can use the general city fund they must ask for and obtain it from the city commissioners. The special city school tax can not be levied unless the county has already taxed itself 3 mills for school purposes, and not in excess of the rate levied by the county. Even then the county board of revenue must be asked to call this election. The collection of tuition fees is impossible unless the patrons see fit to pay them.

This situation makes it absolutely impossible for a city school board to conduct its affairs in a really systematic or businesslike way. No individual can properly plan his expenditures or business firm operate its business intelligently without some idea of its probable revenues. The only way in which it is possible to conduct a business successfully is to have a budget available for expenditure and then to expend it in the best and most systematic manner possible. One can not plan any expenditure intelligently without having at least some idea as to his income; yet this is exactly what city school boards in Alabama under present conditions are required to undertake.

4. The fact that every child of school age is entitled to attend school without any charge carries with it its own obvious suggestion. Needless to say no school can properly be classed as a free school or public school if there is any money charge whatever for admittance or attendance. While the practice of charging fees is more common in the smaller cities, it is sometimes found among cities not so small. It is commonly said by way of justification that these fees are not charged when the money can be obtained from any other source, and that it is better to charge fees than to close the schools. However, when a city has not taxed itself as far as the law allows it can not truly be said to have done all it can to provide free schools for its children. It is quite commonly recognized that the charging of fees for attendance upon free schools is contrary at least to the spirit of the laws, although certain Alabama courts have held that the charging of an incidental fee does not violate the letter if expended for incidentals. The fact that most schools charging such fees keep what is known as a "free list" or "charity list" of children supposedly too poor to pay for their own schooling would seem, if anything, to make matters worse. It tends to degrade the idea of a public school to

that of a charitable institution, and to keep alive the idea of what was formerly known as the pauper school in certain of the States. Public schools for the poor only are certainly not democratic and are not in keeping with the ideals of the twentieth century. Communities should provide from public funds the money necessary for the support of their schools, and the collection of fees for attendance upon public schools, if not now a violation of law, should be made one by plain unequivocal legislative enactment.

5. The consideration of a distant financial policy in the matter of Negro children opens up a very large subject and involves many questions. The State is spending far less money per capita for its Negro children than for its white children. So long as this policy is continued there will be differences of opinion as to the distribution of State and county funds for Negro children. As one citizen of Alabama expressed it, "You ought not to give a city money for its Negro children unless it is going to expend that money in educating them." The whole question of Negro education in the South is a complicated one. It will be discussed further on in this report, under a separate heading.

That the city schools of Alabama are not as a rule receiving the financial support which they should is shown by the following table. It gives the amount of money spent on the schools of various cities in the Union on the per capita basis of total net enrollment, and also upon that of average daily attendance in the schools. Night school enrollment and expenditure are excluded from the totals given. The cities used are taken from various portions of the Union for purposes of comparison:

TABLE 44.—Enrollment, attendance, and expenditure for public schools for year 1917-18.

Cities.	Population, 1910.	Total net enrollment, 1917-18.	Average daily attendance.	Total current expenses.	Per capita cost based on enrollment.	Per capita cost based on average daily attendance.
Omaha, Nebr.....	150,355	20,506	24,933	\$1,697,215	\$49.41	\$60.45
Birmingham, Ala.....	132,685	30,946	21,302	638,178	20.62	29.96
Seranton, Pa.....	129,867	24,984	19,897	886,351	35.48	44.56
Cambridge, Mass.....	104,899	15,350	13,452	767,203	49.96	56.20
Akron, Ohio.....	69,067	26,033	23,803	878,649	32.99	36.82
Peoria, Ill.....	66,960	12,528	9,313	480,461	28.35	51.59
Terre Haute, Ind.....	58,157	12,885	9,955	495,863	38.48	49.81
Mobile, Ala.....	51,521	7,878	5,646	176,811	22.44	31.32
Topeka, Kans.....	43,684	8,405	6,501	397,004	47.23	61.07
McKeesport, Pa.....	42,664	8,468	6,894	307,521	36.23	44.67
Berkeley, Calif.....	40,434	10,611	7,386	533,981	50.32	72.79
Montgomery, Ala.....	38,136	6,151	4,447	119,220	19.38	26.81
Woonsocket, R. I.....	38,125	4,746	3,626	159,642	33.64	44.08
Oshkosh, Wis.....	33,062	5,298	4,118	182,990	34.54	44.44
Atlanta, Ga.....	154,839	28,590	25,563	915,000	32.03	35.80
San Antonio, Tex.....	96,615	23,401	15,631	674,063	28.82	43.44
Louisville, Ky.....	259,000	30,141	22,757	987,880	32.77	43.41

1 Not including night schools.

The significance of this table is obvious. If Omaha, Neb., finds it necessary to pay \$60.45 for each pupil in its elementary schools and

\$86.64 for each pupil in its high school, or \$60.45 for each pupil in all its schools, surely Birmingham, Ala., of approximately the same population as Omaha, must need more money for its schools when it is only expending \$25.63 for pupils in its elementary schools, \$59.21 for each pupil in its high school, and \$29.96 for each pupil in all its schools.

After all, however, the question of the exact method of apportioning money, important though it is, is of distinctly secondary importance in trying to solve the financial problem of the city schools. The really significant fact is that there is not in the aggregate enough money to go around. In such a case the best possible method of distribution will still fail to make a little money do the work of more.

If Topeka, Kans., finds it necessary to pay \$56.65 for every pupil in its elementary schools, \$71.30 for every pupil in its high schools, and \$61.07 for every pupil in all its schools, then certainly Mobile, Ala., with approximately the same population, needs more money for its schools, when it is only expending \$25.46 for every pupil in its elementary schools, \$40.51 for every pupil in its high school, and \$31.32 for every pupil throughout its schools.

An extreme of contrast is shown when we notice that Berkeley, Calif., expends \$63.54 for every elementary school pupil, \$108.64 for every high-school pupil, and \$72.72 for every pupil in the schools; while Montgomery, Ala., a city of approximately the same population, only expends \$21.51 on every elementary school pupil, \$49.31 on every high-school pupil, and \$26.81 on every pupil throughout the schools. Certainly these figures show that Montgomery needs to spend more money for its schools.

All the figures above quoted are based upon average daily attendance. A comparative study of the entire table given will certainly strengthen the belief that the city schools of Alabama are not receiving anything like as much financial support as they should receive, or as other cities of similar size elsewhere are receiving.

Recommendations for increasing appropriations for school purposes.—As to the way in which Alabama cities may secure more money for their schools, your committee submits the following recommendations:

1. Every Alabama city that really desires good schools should avail itself to the utmost of those sources of financial support which are now open under the law. In other words, every such city that has not already done so should tax itself to the full extent of the 3 mills allowed by law as a special city school tax. If conditions can be so changed that in voting for such a tax a city will feel that it does not run the risk of being penalized by having its State and county funds reduced or withdrawn, it is believed that a general campaign for special city taxes will be made in the cities of Alabama.

2. If the full amount allowed by law will not suffice to give the cities as much money as is needed for the support of their schools, or as much as is being expended by similar cities elsewhere, then steps ought to be taken to provide more.

This is a State-wide problem and is treated elsewhere. The constitution of Alabama provides that all property shall be taxed at a fair estimate of its cash value, while a legislative enactment provides that it shall be taxed at 60 per cent of its value, and statistics show that it is actually taxed at about 22 per cent of its taxable value.

To raise more than two and one-half times as much money for the schools as is now being raised, it would be necessary merely to follow the State law, and to raise four and one-half times as much, it would only be necessary to follow the constitutional provision.

The superintendent of city schools.—Each city school board elects a superintendent of city schools. In the smaller cities where there is perhaps only one building for white pupils and one for colored, the superintendent usually teaches one or more classes and is in reality merely a supervising principal. In the very smallest cities he usually teaches the entire school day and is merely a kind of head teacher.

Salaries paid to city superintendents vary from \$850 to \$5,000. In the largest city of the State, the superintendent is paid \$5,000 a year. In Mobile the superintendent of city and county jointly is paid \$3,300. In the third city in the State, the superintendent is paid \$3,000. One city of moderate size last year raised the salary of its superintendent from \$1,800 to \$2,400. The lowest salary quoted in the State superintendent's report for 1917-18, \$850 per year, is paid to the superintendent in a town employing 10 white and 5 colored teachers.

The State school law has very little to say by way of defining the duties of the superintendent of schools. Section 1354 reads as follows:

It shall be the duty of the board of education to elect a superintendent of schools, fix his term of office and salary, and prescribe his powers and duties. The superintendent shall be required to give bond for the faithful performance of his duties, which shall be payable to said city, in a sum to be fixed by the board, not less than \$3,000, with surety or sureties to be approved by the president of the board, the bond to be filed with the clerk of the city or town. The superintendent may be elected clerk of the board of education, and if so elected his bond shall stand as security for the faithful performance of his duties as clerk as well as superintendent, however conditioned. It shall be the duty of the clerk of the board of education to keep full and correct detailed account of all money received and expended. The superintendent shall attend to the taking of the school census, which shall be taken in the month of April of each odd year, and it shall be his duty to make complete and accurate reports of the same to the superintendent of education of the State.

From the above it will be seen that the only duties specifically assigned to the superintendent of city schools by the statute are the duty of taking the census and certain strictly clerical lines of work. As a matter of actual practice, however, executive duties are delegated to the superintendent of schools. In most of the larger places of the State the superintendent is recognized as having the right to nominate teachers, and in general to manage the internal affairs of the schools. In fact, in all matters other than financial the superintendent of city schools in Alabama seems to have about as much of authority and of responsibility as have most men holding similar places in other States of the Union.

With reference to the selection of teachers, the chief limitation upon his authority seems to be the somewhat general dominance of the "home talent" idea.

In financial matters the influence of the city superintendent is purely of an advisory nature. In many instances, though not in all, he prepares for the school board a tentative budget of expenses for the schools for the ensuing year. Owing, however, to the uncertainties concerning the income of the city schools caused by the present method of apportionment, it is a difficult matter for the superintendent to figure intelligently from year to year as to what can be done in the way of increasing salaries, employing additional teachers, and making needed extensions of school work.

Some superintendents assume their measure of responsibility in the matter of securing needed funds for the schools. Others seem to have some measure of timidity, if not of indifference, in the matter of finances. Certainly, until any given city has gone to the full extent allowed by law in the matter of taxing itself for the support of its schools, the superintendent should feel it his duty to leave no stone unturned to arouse the enlightened conscience of his community on the subject of school finances. The superintendent should stand in his community as a leader in respect to acquainting the public with the work of the schools and their needs. He should lose no opportunity to enlist the active interest of the patrons in concrete plans and projects for better maintenance.

In Birmingham there is an assistant superintendent of schools and also a staff of eight special supervisors. In Mobile there are four supervisors, and in Montgomery there are two. In three of the other cities of the State there is one special supervisor to each city. In the remaining cities, however, there is practically no supervision other than that which is given by the superintendent. This work of helping, directing, and inspiring teachers is one of the most important phases of the superintendent's work. It is the observation of the committee that, due in some instances to the fact that the superintendent is teaching for most or all of his time and in some instances

to failure to recognize his opportunity, this important field of usefulness is frequently neglected.

In many cities of the State the superintendent is elected for a term of one year. In Montgomery, Gadsden, and some other cities the term is two years. In a few instances it is three years. In actual practice, the tenure of office of the city superintendent of schools in Alabama appears to be more stable than in most States. Birmingham has had the same superintendent for more than 80 years. Mobile and Montgomery have each had one change within that time. In Greenville there has been no change for 26 years. All things considered, it appears that the city superintendent of schools in Alabama is rather less subject to change on account of political pressure than are superintendents in most States.

The city teachers.—According to the report of the State superintendent for 1917-18, there were in the schools of the 46 cities of the State of Alabama during that year 160 male white teachers, 1,328 female white teachers, 62 male colored teachers, and 383 female colored teachers; a total of 1,488 white teachers and 445 colored teachers.

Practically all of these were certified under the State law. While theoretically the cities of the State still have the right to require their own examinations for certificates for their teachers, they have practically all ceased to do so and are recognizing those granted by the State, except in the case of certain special subjects. A detailed statement as to the requirements for the various grades of State certificates will be found elsewhere in this survey. A comparative statement showing the kinds of certificates of city and rural districts during the year 1917-18 is as follows:

Certificates of city and rural districts compared.

Teachers.	White.				Colored.			
	Life.	First.	Second.	Third.	Life.	First.	Second.	Third.
City teachers.....	457	511	374	54	46	21	240	138
Rural teachers.....	712	1,564	2,909	2,191	74	21	417	1,082

From the above it will be seen that although a much higher percentage of certificates of the upper grades is to be found among the teachers of city than among those of the rural districts, the percentage is nevertheless not particularly high. In other words, the story told by the record of certificates is that there is by no means a uniformly high standard of requirements for either the academic or the professional training of city teachers. Incidentally, it also shows a much lower requirement for colored teachers than for white.

The following table based upon questionnaires sent to teachers in the city schools for 1918-19 throws still further light upon the subject:

Degrees.	Elementary training.		Secondary training.				Normal training.		College training.				Summer school training.					Fach-elor.	Mas-ter.	Degrees.			
	Years attended.		Years attended.		Did not grad-uate.	Gradu-ated.	Years attended.		Years attended.		Weeks attended.												
	6	7	8	9			10	11	12	13	14	15	16	17	18 or more.								
A.	125	676	385	39	106	198	130	627	400	106	149	129	204	401	8	23	276	37	118	90	209	373	28
	13	155	180	7	21	52	177	154	126	13	17	18	39	63	3	7	107	9	17	38	26	9	2
	Number of white teachers.																						
	Number of colored teachers.																						
B.	Number of white teachers.																						
	Number of colored teachers.																						
C.	Number of white teachers.																						
	Number of colored teachers.																						

Teachers' salaries.—According to the report of the State superintendent of schools for 1917-18, the average yearly salaries paid to city teachers and rural teachers in the State during that year were as follows:

Salaries of city and rural teachers compared.

	White.		Colored.	
	Male.	Female.	Male.	Female.
City teachers.....	\$1,347	\$575	\$476	\$315
Rural teachers.....	377	321	167	139

These figures reveal that, although the amounts paid to city school teachers in Alabama are somewhat larger than those paid to rural teachers, they are still pitifully small. The amounts paid to male teachers undoubtedly include those paid to superintendents and principals in the larger cities. Furthermore, it must be remembered that the large city of Birmingham reported for that year 611 teachers out of 1,933, or almost one-third of all the city teachers in the State. The cities of Birmingham, Mobile, and Montgomery, with more than one-half of all the city teachers in the State, raise the average to a considerable extent. The salaries in the smaller cities were decidedly less.

However, even on the basis of the figures above given, it is evident that if the amount were distributed through the 12 months of the year, the average salary paid to a white man teacher in the city schools of Alabama was \$112.25 per month, the average salary paid to a white woman teacher was slightly less than \$48 per month, the average salary paid to a colored man teacher was exactly \$38 per month, and the average salary paid to a colored woman teacher was exactly \$26.25 for each month of the year. These figures include high-school teachers as well as teachers in the grades.

It is useless to expect the very highest kind of services or of ability for such salaries. If the quality of the teaching in the schoolrooms of Alabama is not as high as it ought to be it is doubtless worth at least all that is paid for it.

In most of the smaller cities \$70 a month is the maximum paid to grade teachers in the white schools. In some places it is \$60 a month. High-school teachers are paid slightly more than grade-school teachers. Nevertheless, in the smaller cities of Alabama a high-school teacher who receives as much as \$90 a month for nine months may consider herself fortunate. Teachers are not only paid less than stenographers, bookkeepers, and others engaged in commercial lines; they are paid less than teachers in similar cities in other States. It

would seem to be hopeless to try to raise the standard of teaching in Alabama cities very much above what it is at present until it becomes possible to pay the teachers more nearly in accordance with the value of the services expected of them.

The maximum salaries paid to grade teachers in the white schools in several representative Alabama cities during the year 1918-19 are as follows:

Maximum salaries of grade teachers in white schools in 1918-19.

Cities.	Per month for 9 months.	Per year.
Birmingham.....	\$100.00	\$900.00
Mobile.....	87.50	743.75
Montgomery.....	90.00	810.00
Selma.....	80.00	720.00
Sheffield.....	75.00	675.00

¹ For $3\frac{1}{2}$ months.

Salaries in the colored schools are still lower. The average colored male teacher in the city schools receives slightly more than a third of the salary paid to the white male teacher; the colored female teacher in the city schools receives about 55 per cent of the salary paid to the white woman teacher in city schools. These salaries will be discussed further under the separate topic of the education of the Negro in city schools.

It is encouraging to point out that in many cities in Alabama there is a distinct upward tendency in teachers' salaries. In one city where the maximum for grade teachers is now \$70, it was stated that two years ago the maximum was \$50. Similar increases are noted in other cities. At best, however, these increases have not nearly met the increase in the cost of living.

Conditions during the present year have been made even worse than usual on account of the openings for workers caused by the war activities of the Government. The Alabama cities, as well as cities elsewhere, have this year lost many teachers who have gone into more remunerative Government clerkships, or who have taken positions left vacant by men who entered the Army. The prevalence of influenza during the early part of the present school term added to the difficulties. As a result, one superintendent of a school with 14 teachers reported that only 2 of those teachers were with him during the preceding year. One supervisor with 86 teachers under her direction reported that of this number 68 were new to the school system and a majority were teaching for their first year. In one high school the present teacher of science is the thirteenth in a period of five months. In one grade school, the ninth teacher so far

this year was just entering upon her work in a given room. All these difficulties merely throw additional emphasis upon the necessity for paying better salaries to teachers in Alabama cities.

In many cities the prevailing price for board is given at from \$25 to \$35 per month. One small town reports that board can be secured for \$15.

One factor which undoubtedly has its influence both upon the quality of teaching and upon the salaries paid is what is sometimes known as the "home-talent" idea. In many cities the percentage of teachers who live in the city is very high. In one fairly good-sized city it is estimated that 90 per cent of the teachers were local people.

Within certain limitations, the teacher who was born and reared in a given community, and is consequently in touch with its ideals and needs, undoubtedly has it in her power by that very fact to render more service to the schools of her city than could any other teacher who has not had superior training or superior qualifications of some kind. On the other hand, it is equally true that if all or practically all the teachers in a given school system come from any one source, there is great danger that their horizon will be narrowed and their ideals lowered. No one city or school has a monopoly of all the things worth having. An occasional change of point of view is a good thing for any individual or any community. An occasional infusion of new blood may be helpful. Inbreeding is as bad for schools as it is for live stock or for human beings. The wider the field open for the selection of teachers, the greater the opportunity for the selection of good material. The smaller also becomes the likelihood of the bringing to bear of political or social pressure for the selection or the retention of incompetents.

It should be observed in passing that in many of the city schools of Alabama there seems to be a commendable school spirit. The teachers recognize that they are underpaid, but they are not sullen in regard to it. There is a spirit of cheerful, uncomplaining, loyal service which is in most instances wholly out of keeping with the small salaries they are receiving. This spirit simply makes it all the more urgent that these teachers should be better paid. It follows that better pay will demand better preparation on the part of the teachers.

In addition to providing for large increases in salaries of school employees, it might be well for the cities of Alabama to begin to consider the matter of retirement funds for the teachers. The city teachers' association of Mobile has made a beginning in this direction.

All grades of certificates issued by the State may be obtained by examination. Many students who are still in high school can and do pass those upon which second or third grade certificates are issued.

If the holders are 18 years of age all conditions for teaching are met. In consequence many teachers in the schools of the State have not had the equivalent of a full high-school course. Despite these low standards of qualification, nearly all of the cities are finding it increasingly difficult to fill vacancies in their corps. The prospect for the future in this respect is not bright, for in the annual State examination for teachers recently held the number of applicants for certificates has fallen off nearly one-half. This falling off is greatest among those applying for certificates of highest rank. In the entire State, on this occasion, only 65 applied for permission to take the examination for first-grade certificates and only 50 for life certificates. In Greene County no one applied for any certificate higher than third grade, and only five for this. The reason for this disconcerting decline in the number applying for teachers' certificates is that salaries fail to advance in proportion to the rise in living costs.

It is clear that in the cities, as well as in the country districts, Alabama is facing a teacher shortage which is serious. The solution rests primarily upon securing funds to very markedly increase salary schedules. Furthermore, along with this, provision must be made whereby young people of ability may better receive a more satisfactory training than now obtains. Plans for securing this training are discussed elsewhere in this report.

After teachers have entered service much can be done to improve their work. Teachers' meetings, held by superintendent, supervisor, or principal; summer schools and classes organized for teachers; university-extension classes offering work along educational lines; teachers' reading circles; the county and city institute; provision for hearing talks by inspirational educators; these are seeking to improve their teaching corps. It is clear, however, that much still remains to be done along this line even among the best city school systems. It may be added that there are some cities in the State in which the committee failed to find evidence that any attempt is being made consciously to improve the work of the teachers as a group.

School buildings.—Quite naturally the war and its attendant conditions have had a tendency to retard the erecting of city school buildings in Alabama. Very few of the cities have erected any new school buildings within the past two years. There are, however, a few notable exceptions.

Sheffield, Troy, and Opelika have or are completing new buildings. Selma has the largest percentage of new school buildings in any city of the State.

The city of Birmingham is at the immediate present in an unfortunate and somewhat peculiar condition with reference to its school buildings. Her Central High School building burned down about a

year ago, and since that time the pupils have been housed in the buildings formerly occupied by a medical college. The city has issued \$2,000,000 in bonds for the erection of new elementary-school buildings, and \$1,000,000 in bonds for the erection of new high schools. However, owing to financial conditions brought about by the war, the city has not yet been able to sell either of these issues, and consequently has not yet been able to erect buildings. The city is badly in need of better buildings and more of them, but has taken steps to remedy the conditions.

The high school in Mobile, the second city of the State, is known as Barton Academy, erected in 1853 and remodeled in 1915 at an expense of \$30,000. It is a modern, up-to-date high-school building.

Mobile issued \$150,000 in bonds for school buildings in 1915. With this amount the high school was remodeled and three elementary-school buildings were erected. The most expensive school building for elementary purposes in Mobile cost \$38,000 and contains rooms for 14 teachers and their classes.

The city of Montgomery has a comparatively new high-school building. It was erected in 1909-1911 at a cost of \$138,467. Her elementary schools also are in better condition than most of the cities of the State. Montgomery probably has the best buildings for colored people to be found in the State.

In several of the smaller cities comparatively new and good school buildings are to be found. In most instances, however, the city school buildings are old, inadequate, and poorly constructed. Some of them were erected before the Civil War.

In many of the cities the buildings are poorly lighted, poorly ventilated, and most unattractive in appearance. Some lack cloakrooms or blackboards. There is not one single elementary public school building in any city in the State which is thoroughly fire-proof and cost as much as \$100,000. When we realize that only recently the city of Buffalo, N. Y., issued bonds to the extent of \$8,000,000 for the purpose of erecting 16 new school buildings, at an average cost of \$500,000, we obtain some standard of comparison as to what really modern school buildings cost. High-school buildings costing half a million dollars, and elementary-school buildings costing over \$100,000 are not unusual in cities of even moderate size. In 1917-18 there were in all the cities of Alabama 135 buildings owned by the cities and valued at \$4,545,717, with their grounds, or \$33,672 each; and colored school buildings to the number of 53, valued with their grounds at \$351,465, or less than \$7,000 each.

In the city of Selma, the newest and best school building erected is of the one-story type. This type of construction is not unusual in many States and would seem to be well adapted to the climate of

Alabama. It has the advantage of reducing the fire risk, eliminating the stair-climbing and simplifying the problems of light and ventilation. It lends itself readily to the unit idea of construction and hence is elastic. Many of the school buildings erected by the Tennessee Coal & Iron Co. are of this type. In addition to the other advantages which it possesses, this type of building costs less to construct than the conventional type.

In most instances the grounds for city schools are too small, usually less than one full block in area, even in the smaller cities. In some cases the building covers fully half of the ground available. In this day, when physical education is receiving increasing attention, and when games and athletic sports are becoming recognized as a legitimate and beneficial part of the modern school curriculum, certainly our school grounds should be large enough to afford room for healthful physical activities on the part of the children. Five acres is none too much for the elementary school, and 10 acres none too much for a high school; a full city block should be the absolute minimum size for the grounds of any city school.

All the above statements concerning conditions observed refer primarily to schools for white children. The situation with reference to buildings for colored children is far worse. In many instances, these buildings are neither safe nor decent. They will be discussed under a separate heading.

There is a wide range of difference in the degree of care that is given to city school buildings in the State. Many of them are clean and well cared for. On the other hand, there are many that can only be described as filthy. During the past year, it has been difficult to secure competent janitors at the wages available for this purpose. It may ordinarily be noticed that the smaller the wages paid to the janitor, the poorer is the service obtained from him. On one occasion, in a building that was noticeably filthy, the visitor asked the superintendent what was paid to the janitor and was told that it was \$6 per week. The visitor was just about to suggest that better wages might perhaps secure better results when the superintendent stopped him with the observation that the reason the wages were so low was because there was really so little to be done.

The janitor is a highly important factor in the administration of any system of city schools. It pays to pay him enough money to secure adequate service from him. The plan which Bessemer has adopted of employing a school custodian for the supervision of janitors is one to be recommended to the larger cities.

School equipment.—There is as much diversity in the seating and other equipment of the buildings as there is in the buildings themselves. In many instances the seats are good, modern school desks. In some instances they are adjustable. In other instances, however,

the desks are old and out of date. In some cases there are double desks and in others long benches with crude pine desks are used. These latter are the customary seating equipment in most of the Negro schools. No movable chairs and tables were observed in any of the primary schoolrooms of the State. Superintendents should consider the matter of giving them a trial. Desk chairs and other types of movable seating equipment were found in a few of the high-school rooms. They could with advantage be used still more frequently.

In the larger high-school buildings there is comparatively good laboratory equipment for the teaching of such subjects as chemistry, physics, and biology. Such is also the case in a few of the high schools in cities of medium size. However, in the high schools of the majority of the cities there is practically no laboratory equipment for the teaching of these subjects. In a number of such instances the superintendent reported that college-entrance credit is accorded the work done by his high school in these subjects, despite the obvious lack of equipment. There is a general lack of library material and likewise of teacher's helps, such as maps, globes, charts, handwork material, etc. The value of the equipment in all the schools of the 46 cities of the State, including seating equipment and all the rest, in 1917-18 is given by the State superintendent as \$406,157 for white schools and \$47,420 for colored schools.

School textbooks.—As has been quoted from the State law, it is made the duty of the city school board to select textbooks "so far as can be done without interfering with the State Uniform Textbook Law and the work of the State Textbook Board." However, this restriction practically takes away all authority from the local school except with reference to high-school subjects. A uniform State textbook law is, within certain limits, helpful in many respects. However, in order that the list of textbooks may be as helpful as possible, it should not only provide for uniformity but it should also leave room for flexibility. The State of Alabama has as good a list of textbooks in most instances as could be selected with a view to meeting all of the wide diversities of interests and of needs of the State.

Birmingham furnishes free textbooks to the children in the first five grades. Phoenix city furnishes free books to all her children. A few cities in which fees are charged furnish free textbooks and all school supplies, paying for them out of these fees.

The course of study.—There is a uniform course of study made out by the State superintendent of schools for use in all the schools of the State that are directly under the control of the State superintendent's office. The cities of the State, however, are not required to follow this course of study, except that they are required to use the State-adopted uniform textbooks in all of their elementary schools.

As a matter of fact the schools in most of the smaller cities follow the course rather closely.

With very few exceptions, the course of study in the city schools of the State is inclined to be narrow, academic, and conventional. In the grades below the high school there is practically no variety. Birmingham gives manual training to the boys, and cooking and sewing to the girls of its upper intermediate grades. Mobile teaches cooking and sewing to the girls in the upper grades as well as in the high school. Montgomery has domestic science in the grades of two schools in its mill district; also domestic science and manual training in its high school. In few other cities in the State is there any form of industrial work in the grades below the high school.

Mobile is at present the only city in the State with a system of kindergartens maintained at public expense. There are seven kindergartens in the Mobile public-school system with approximately 600 pupils enrolled, costing approximately \$7,000 per year. When the financial situation in the Mobile schools is considered, it appears that this is a fairly liberal appropriation for kindergarten work. Birmingham formerly had a system of kindergartens, but has temporarily discontinued them for financial reasons. In several places in the State there are kindergartens maintained from private funds with more or less of connection with the public-school system. Among these places are Lanett, Florence, Opelika, and Tuscaloosa.

In most of the high schools in the larger cities, cooking and sewing are offered to the girls, and woodwork and mechanical drawing to the boys. Birmingham is the only city offering forging or machine shopwork. Cooking and sewing are offered to the girls in the high schools in more cases than manual training to the boys.

Commercial courses are offered only in the larger cities.

Four cities in the State within the past year took advantage of the Smith-Hughes fund in giving vocational work. Most of this work was done in Birmingham. Mobile had some classes in radio-buzzer during the war. Dothan received help from this fund to the extent of \$6,000 for work in vocational home economics. Lanett received some of these funds for evening work and for part-time work.

In few cities in the State is any industrial work whatever taught to the Negroes. The Negro high school in Birmingham is organized largely along industrial lines and is in many respects one of the most impressive pieces of educational work to be found in any of the city schools of the State. In Selma, cooking and sewing are taught to Negro girls in sixth, seventh, and eighth grades.

In several cities no city high school is maintained, the work of giving instruction in the high-school subjects being turned over to the county high school located at these cities. The committee believes that this arrangement is a disadvantage to the high-school interests.

of the city, because it relieves the city of any financial responsibility for its own children of high-school grade. The county high school doubtless has its place in the educational system of the State, but that place is to educate the children of the rural districts of the county. Certainly it is not the place of the county high school to relieve the city of the necessity for caring for its own high-school children when the city is large enough to maintain a high school itself.

In practically all the cities the course of study is organized on the basis of seven grades below the high school and four years in the high school. This system prevails even in cities in which children are allowed to enter the first grade at 6 years of age, though in most cities they are not allowed to enter until 7.

There is only one school in the State which is referred to as a junior high school. This is found in Birmingham, and, as the superintendent of schools there explains, it is really not a junior high school at all. It is merely a building which for purposes of convenience is attended by pupils of seventh grades from certain adjacent elementary schools, and by overflow pupils from the first year of the Central High School. It is organized on this basis merely for convenience and not from principle.

The survey committee believes that it would be distinctly advantageous for the entire State course of study to be reorganized upon the six, three, and three plan, provided that before this is done the legal school age in the State be lowered so that pupils can be regularly admitted to the first grade at 6 years of age instead of 7 as at present provided by law.

The committee further believes that in all the larger high schools of the State strong industrial courses should be organized to correlate closely with the industrial interests of the community. Birmingham is already planning such industrial work as will bring her schools closely into contact with the great steel and iron industry which is the backbone of the city, and has some such work already going. Mobile should organize courses which will correlate with the ship-building industries. In some cities the lumber industry is the predominant one and should be recognized in the course of study. In cotton mill towns, courses in textiles should be given, with the cooperation of the mills if possible. In many cities, agriculture is the support and the dominant interest of the community. Strong courses in agriculture should be provided in these schools. In practically every city in the State, there should be some variation from the conventional course of study, for the purpose of meeting the special needs of the community. The most marked variation of all should be in the case of the colored schools. In the upper grades of these schools, the industrial note should be the predominant one.

In most cities promotions are made annually and are based largely upon the results of written examinations given at stated times. They should be made semiannually or oftener, and considerations other than formal examinations should be taken into account. Promotions in high schools should be made by subjects and not by grades.

The committee has observed that the enrollment in the fourth year of many of the high schools in the smaller cities of the State is unduly small. Upon inquiry as to the reason for this, the answer has been given in a number of instances that this situation is due to the fact that the institutions of higher learning accept high-school students with but 12 units of credit, which may be obtained in three years' of high-school work. Your committee feels that whatever may have been the justification for the practice in the past, the time has been reached when it should be discontinued.

No city in the State has a special room for the education of deaf, blind, or subnormal children. In one place we found an ungraded class for retarded pupils. Birmingham has two parental schools, one for whites and one for colored children, in conjunction with the juvenile court.

Health work.—In a few of the larger cities in the State, there is some form of medical instruction for which the city pays. Some of the others report that the laws requiring compulsory vaccination are enforced. Even in some of the larger cities, however, no effort is made to enforce compulsory vaccination. In one such city, a well-developed case of smallpox was found in one of the colored schools on the day the survey committee visited that school. It was stated that a large number of the pupils in that school had probably never been vaccinated.

Only three cities spend money for the specific purpose of physical training. In several others there was some form of physical exercise given certain rooms by the regular grade teachers. In many, however, the subject of physical education was ignored in the curriculum and in actual practice. In a few cities, some playground apparatus has been provided by outside agencies. In a number of the high schools encouragement of some nature is given to athletic games and sports.

In Mobile the National Government is furnishing play supervisors to the schools in certain districts. They visit the various buildings in turn at recess. In most cities, however, there appears to be nothing in the way of supervised play.

In several of the cities there are lunch rooms for the children, operated at cost either by the school board, the school improvement association, or the teachers. These lunch rooms appeared to be doing a good work for the health of the children by furnishing nutritious lunches at a minimum cost. The city of Selma seems to have this

plan particularly well worked out. Children unable to pay are provided with the lunches without cost to them.

Opelika has the only swimming pool to be found in connection with any school system in the State. This was built without expense to the school board, by selling family tickets in advance at \$10 each. These permit free access to the pool. Members of other families pay a small charge barely sufficient to cover the cost of operating the pool. Opelika is also one of the cities with playground apparatus in some of its school yards.

In many cases the toilet fixtures are of the most modern and sanitary kind. In some instances there were outdoor toilets lacking provision for even decent privacy. In a very few instances there were no toilets at all. In the Negro schools, in most instances, toilet facilities were neither adequate, decent, nor sanitary. In a number of instances, both in white and colored schools, even where toilet facilities are of modern character they are permitted to remain in a filthy condition.

School attendance laws.—Under the general school laws of the State, provision is made for a compulsory school attendance of 80 days each year. However, any city or county that desires to do so may reduce this term to 60 days. Among the 46 cities there is a wide range in the strictness with which this law is being enforced. In a few instances there seems to be an earnest effort made to enforce it. In many instances city superintendents frankly stated that they were ignoring it. The prevailing attitude probably was that expressed by one superintendent when he said that in his city the compulsory attendance law was being enforced "rather lightly." The reason given for this is that, if every pupil were to attend, there would not be school facilities to accommodate them. Particularly is this true concerning the Negro.

The fact that in many cities a fee of some kind is charged for school attendance makes it seem unreasonable to expect the compulsory law to be enforced there. It is hard enough at best to compel a man to send his child to school when he does not wish to. It is practically impossible to compel him to pay for the privilege of sending. The compulsory education law in Alabama is, however, only in its second year. The fact that an earnest effort to enforce it is being made with reasonable degree of success in even a few of the cities shows progress and shows the growth of public sentiment. The child-labor laws of the State are gradually being enforced more fully, and tend by this fact to make easier the enforcement of the compulsory education law. The committee recommends that the period of compulsory attendance should be extended to cover the entire school year, and that the law be enforced.

School extension.—Birmingham is the only city in the State reporting the operation of night schools at the expense of the city. There are a few other places where night schools are maintained by mill owners for their employees. The problem of Americanization is not so serious in Alabama as in many other States, owing to the small percentage of foreign-born population in the State. However, the existence of a very large amount of adult illiteracy in certain sections would suggest the desirability of establishing night schools there. In these cities where there is an auditorium in the school building it is used to a considerable extent for community purposes. In a few cities the community center idea is recognized.

One of the most interesting and most helpful features connected with the city schools of Alabama is the work done by what is known as the School Improvement Association. This is an organization of friends and patrons of the schools. It works along lines similar to those of the organization known as mothers' clubs, school patrons' leagues, or parent-teacher associations in other parts of the country. As will be seen by the name, the emphasis is laid upon the improvement of the school. Generally this refers to the improvement of the physical conditions. If there is a piano, a victrola, or a sanitary drinking fountain to be purchased, and the school board has no money available for the purpose, the School Improvement Association furnishes it. It is undoubtedly a very helpful factor in the public-school work of the cities of the State. The only thing to be guarded against is the danger that the cities may come to depend upon this organization for things which they ought themselves to provide.

During the year 1917-18 this organization is credited with having expended \$11,007 in betterments for the white schools in the cities of the State and \$11,540 in betterments for the colored schools of the State.

In Birmingham the School Improvement Association has a constitution and by-laws that have been formally recognized by the board of education. The association itself is given quasi-official recognition by the board. In Andalusia a similar work is done by the school committee of the Ladies' Civic Society. This organization provided the money to furnish the domestic-science equipment in the high school.

Some outstanding educational object-lessons.—In addition to the excellent work being done in many of its cities, there are in the State of Alabama at least two concrete instances which are well worthy of study by cities interested in seeing the best type of school buildings and a broad and well-developed system of school activities. One of these is the system which the United States Government is developing on its Ordnance Reservation at Muscle Shoals. The other is the

systems of schools established by the Tennessee Coal & Iron Co. for its employees in a number of places in the State.

The buildings for these schools are not expensive, but they are models in their way. They are one story in height and are constructed with reference to the most modern ideas of heating, lighting, and ventilation. The company furnishes medical and dental inspection. It gives systematic physical training, furnishes churches to be used in turn by the various denominations, club houses to be used by its white employees and their families, and "fraternal halls" for the colored employees.

The committee believes that it would be well for every school superintendent in Alabama who has not already done so to make a study of the school plant and the school activities in these schools. When due publicity is given and the people of the various communities begin to recognize the type of work which their schools ought to do, their educational vision will be broadened and the first steps will be taken toward securing the additional money needed.

Negro schools in the cities.—No observant visitor of the city schools of the State can fail to be impressed with the fact that in reality he is seeing two systems of schools instead of one. It is therefore necessary to consider the question of the education of the Negro separately.

The first place where the distinction arises is in the distribution of funds. As before stated, the State superintendent of schools distributes State school funds on a strictly per capita basis. It may be added, however, that the only place in the State school system where white and colored children are counted together on a per capita basis is in the State superintendent's office.

When the money reaches the county board, the matter of the further distribution of it is left to the discretion of that board. In a few instances this is done on a per capita basis between the cities and the county districts, but in most it is not. It is the question of the Negro children which has much to do with making the further distribution uncertain. It is argued, not without some show of reason, that if a city has a large percentage of Negroes, it is not worth while to give them their per capita share of the money, since it will not be expended upon the Negroes, but upon the white children of the city. It would certainly sound reasonable that if a city or other district is not proposing to educate the Negroes it is not entitled to receive its full share of the money which the State apportions for educating them.

With a view to meeting this condition the committee has elsewhere recommended that the State, in the distribution of its funds, should adopt some definite policy in regard to the education of the Negro children. Every city in the State that has any Negro population is making some effort to educate Negro children, but in no city is this

satisfactory to school officials or citizens. This situation seems to rise not so much from any desire to deprive the Negro of the education which he should receive as from the fact that there are not funds enough to meet the school needs. The principle is generally accepted of providing first for the needs of the white children and then giving the Negro what is left. Ordinarily what is left is very little. The very worst school for white children is with few exceptions better than the best school for Negroes.

The Negro school building is ordinarily a dilapidated wooden building, a fire trap, frequently looking as if it were in danger of falling down. Seldom are there decent and sanitary toilets. The rooms are frequently filthy and overcrowded. In a few cities the superintendent did not know where the Negro school was located.

In one prosperous little city of the State there was an expenditure of some \$20 per capita on the 350 white children enrolled. In the same city there were two colored teachers in a rented building with 175 children enrolled. The only contribution which the city made to this colored school was the payment of \$50 a month to one of the teachers for seven months. The Negroes themselves by fees and from other sources paid the other teacher, the rent of the building, and incidental expenses. The \$350 paid by the city for the education of these 175 children made a per capita expenditure of exactly \$2 yearly on its colored schools, as opposed to \$20 per capita on its white schools. In still another city, the principal was paid \$50 a month, and out of this sum was expected to pay the rent for his school building. The other teacher was paid by tuition fees, if at all.

In one of the medium-sized cities of the State, Negro schools were actually run at a financial profit to the city. There were 446 children enrolled in this school, taught by six teachers, of whom five were paid by the city, and one by the Negroes themselves. The principal of the school holds a degree from the University of Chicago and was paid \$100 per month. The first-grade teacher had an average attendance of 115 pupils, which she taught in two shifts of half a day each. She was paid \$40 a month. The fourth and fifth grade teacher had 75 pupils enrolled and received \$40 a month. These pupils received three months of school free, just as did the white children of the city. During this time the city met the pay roll of teachers, amounting to \$260 a month, or \$780 for three months. To provide this amount, it received from the State of Alabama \$2.96 per capita on the 674 Negro children enumerated on its census, or \$1,995.04 in all. After expending \$780 for its three months of free term, there was a profit of \$1,215.04 remaining from the transaction. For the remaining six months of the term, the Negroes paid tuition fees ranging from 50 cents a month in the lower grades to \$1.50 in the upper grades. An

average tuition fee of 75 cents a month would more than pay the full cost of salaries for the teachers, leaving the city a small profit on this portion of the term also.

The Negro citizens of this same community have raised \$3,000 in cash to build an annex to relieve their greatly overcrowded building. The city commission had granted them permission to erect this building by the use of these funds.

In a number of cities the Negroes are engaged in raising funds for the erection of their own buildings. In one place, they started out to raise \$20,000 for the erection of a high-school building and have already secured practically one-third of that amount. The money has been raised chiefly by entertainments.

A few cities are doing more for their Negroes. Montgomery probably has better, more substantial, and cleaner buildings for its Negro schools than has any other of the larger cities of the State. These are for the most part equipped with good desks, some of them adjustable. Selma has recently erected a good brick building for its Negro schools. Opelika has a school building above the average for Negroes. Mobile has one brick building for Negroes. Birmingham has one and is planning to have more when the proceeds of her recent bond issue become available.

Birmingham is the only city in the State that is undertaking to do anything adequate for its Negro children, along lines of industrial training. Its Negro high-school is doing one of the most interesting pieces of educational work in the State. The equipment is the most meager. There are a number of wooden buildings, built somewhat on the cottage order. The boys of the school built some of these and painted them under the direction of their teachers. Every particle of the equipment is utilized. There is work in carpentry, painting, bricklaying, shoemaking, gardening, tailoring, dyeing, suit-pressing, shoe-shining, and many other lines of practical value. The girls in the printing shop furnished some visiting cards to the visitors on short notice. There is work in cooking, sewing, millinery, and home-nursing for the girls. During the recent influenza epidemic the girls from the home-nursing department of this school were a considerable factor in helping the physicians of the city and the surrounding country, to handle the situation. As a result of the favorable attention which their services attracted, a company which is putting in a large private hospital in the city is planning to use the services of graduates of this school and to give them such further training that they will rank as professionally trained nurses.

The leading hotels of the city call for the trained boys and girls of this school to help serve at special banquets and receptions. For this

work they receive suitable pay. The principal of the school only sends on such occasions such boys and girls as have made passing grades in all their subjects. In the Council Elementary Colored School of the same city an effort is being made to work out the elementary course for colored pupils along similar industrial lines.

Your committee very strongly recommends industrial work of this kind for colored high schools and to some extent colored elementary schools all over the State. The industrial ideas of Booker T. Washington are embodied in the great school for negroes at Tuskegee, and are good ideas to consider in any scheme for Negro education. It is of course understood that, if a system of education is to be a vital thing, it must be rooted in the life and the ideals of the people for whose benefit it is intended and upon whose support it is dependent. No system of education, however commendable, would live permanently if it were imposed upon a people by an outside power, contrary to their thought and their ideals.

Theoretically, it might be argued that the same amount per capita should be expended by the cities of Alabama upon their Negro schools as upon their white schools. Practically, however, such is not the case and may not be the case for a long time. There are, however, certain principles that may suggest a certain minimum of undertaking which would be in accordance both with humanity and with enlightened self-interest:

1. It may be recognized, to begin with, that no system of education is likely to be worth a great deal more than it costs.

So long as the city expends only \$2 per capita on the education of its Negro children, it is not likely to secure from that expenditure very much of educational return. To do anything adequate for the Negro will require more money than has been expended on his education.

2. It may be recognized in the second place that the Negro is industrially an asset to the South, but may become a liability. To make the asset reach its full value and to decrease the likelihood of its becoming a liability will require an intelligent, well conceived, and well executed system of industrial education. The recent exodus of Negroes from the South was caused partly by the scale of wages paid elsewhere and partly by the better schools obtainable elsewhere. The exodus went to the extent of causing the South to feel to some extent the shortage of Negro labor. This labor can never be of the greatest value to the South until the Negro receives in the schools such industrial training and such education in the fundamentals as will bring him to his highest capacity for service.

3. It should be recognized, in the third place, that the physical welfare of the city Negro has almost an immediate effect, upon the physical welfare of the white inhabitants of the city. A case of small-

pox in the Negro schools may be transmitted to the children of the white schools. A case of smallpox in the home of the Negro washer-woman may be carried home in the clothes to the finest residence district of the city.

SUMMARY OF RECOMMENDATIONS CONCERNING CITY SCHOOLS

The committee recommends:

1. That the scope and power of city boards of education be enlarged in general, and with specific reference to the following powers:
 - (a) To call elections for the issuance of school bonds.
 - (b) To call elections for the levying of school taxes.
 - (c) To purchase school sites, approve building plans, and erect buildings.
2. That whatever money may be furnished by the State to the city schools should be—
 - (a) Sent directly to the city school boards.
 - (b) Apportioned on some definite basis so that the city may have some idea from year to year as to the amount of financial help it will receive from the State.
3. That every city which has not already done so should tax itself to the full legal limit for the support of its schools.
4. That the proper steps be taken to provide for the increase of property assessments until they shall at least reach the percentage of value provided for in the statute on the subject.
5. That the practice of charging tuition fees for attendance upon the public schools be abolished by law.
6. That the salaries of teachers in every city in the State be greatly increased.
7. That greater freedom be allowed to cities in the selection of textbooks.
8. That all public-school buildings in cities should be—
 - (a) Built as nearly fireproof as is practicable.
 - (b) Built with reference to the best and most modern ideas of heating, lighting, and ventilation.
 - (c) Built with auditoriums or assembly rooms.
 - (d) Built on the unit type, so they can be added to as need arises.
 - (e) Constructed with due reference to the widest possible use by the community as a whole.
 - (f) Situated on 5 acres of school ground in the case of an elementary school, or on 10 acres in case of a high school; and in no case on less than a full city block.
 - (g) Made as attractive as possible by design, by careful keeping, and by such devices as flowers, window boxes, etc.
 - (h) Designed after consideration has been given to the one-story type of school architecture for elementary schools.
 - (i) Equipped with movable tables and chairs in first-grade rooms and with movable desk chairs in high schools.
9. That the course of study should provide—
 - (a) A greater amount of physical training.
 - (b) Greater stress on education on health subjects.
 - (c) Greater flexibility to meet the demands of the individual child.
 - (d) Greater flexibility to meet the needs of different communities.
 - (e) More industrial work, preferably in cooperation with mills or other predominant local industries.

10. That pupils be promoted—
 - (a) Semiannually or oftener, instead of annually.
 - (b) Upon a basis including more than mere standing upon written examinations.
 - (c) In high schools, by subjects instead of by grades.
11. That the period of compulsory attendance be extended in the cities to cover the entire school year, and that the law on the subject be better enforced.
12. That there be better and more provision for activities along school extension lines, including night schools, afternoon classes, part-time schools, etc.
13. That the legal entrance age be lowered from 7 to 6 years.
14. That the State course of study be reorganized upon the six and three and three basis.
15. That schools for Negroes should—
 - (a) Have a term of not less than 6 months.
 - (b) Be housed in buildings that are safe, decent, sanitary, clean, comfortable, and sufficient in number.
 - (c) Provide adequate instruction in reading, writing, and arithmetic, and in such of the industries as the pupils will have the opportunity to engage in advantageously in after life.
 - (d) Pay their teachers enough to induce them to make proper preparation for their work.
16. That legal provision be made for greater uniformity in the constitution of city boards of education. It is suggested that these boards shall consist of seven members, each appointed or elected from the city at large. If not elected by the people, members of these boards should be appointed by the mayor and confirmed by the board of aldermen. They should hold office for a term of seven years, the term of one member expiring each year. Members of boards should be so selected as to make sure that that all classes of citizens and all the main industrial and professional interests are represented.

Chapter XIII.

INSTITUTIONS FOR DEFECTIVE, DELINQUENT, AND SUBNORMAL CHILDREN.

The survey committee has made no attempt to study the child-caring institutions of the State in detail because they have already been covered sufficiently in two excellent reports; the one, entitled "Child Welfare in Alabama," being an inquiry by the National Child Labor Committee under the auspices and with the cooperation of the University of Alabama; the other, entitled "Social Problems of Alabama," being a report by the Russell Sage Foundation made at the request of Gov. Charles Henderson. These reports list 2,191 children in 26 institutions, of which 341 are defectives in 3 State institutions, 1,103 are dependents in 16 municipal and private institutions, and 747 are delinquents in 7 State and municipal institutions.

The present section limits its discussion to the child-caring institutions maintained by the State and treats them in their primary aspects as supplements of the public-school system of the State, to which they must be joined if their educational functions are not to be wholly lost sight of in the present public demand to have these schools become self-supporting through the labor of the children.

Underlying premises.—It is difficult for the general public to think of these institutions as educational. Particularly is this true of the industrial schools which are directly descended from the old prison system and have unfortunately retained many of the prison practices. The schools for the deaf and dumb lie, in the popular mind, much closer to the public schools, because expert educators are needed to manage their wards. In the correctional schools the purely educational phases of institutional life are too often subordinated to the purely disciplinary and workaday life.

Purposes of the industrial school.—The reform school, or industrial school, exists for the training of children who have become wayward to the point where the home can no longer control them. The school must, therefore, stand *in loco parentis* and provide them with all forms of education—physical, intellectual, vocational, and moral, until such time as the inmates may be intrusted with liberty and in time become useful citizens.

(a) *Physical Education.*—These children need the best form of physical education under the direction of experts because by reason

of bad environment and general neglect most of them at the time of commitment are in a poor physical condition. Their success in life, after leaving school, will depend largely on the equipment of health, strength, and good habits acquired in the school.

(b) *Cultural Education.*—Children committed to industrial schools are far behind other children of similar age in the common-school subjects. Thus of the 311 white boys in the elementary school of Alabama Boys' Industrial School (as may be seen in Table 46), only 1 child was ahead of normal public age grade, 9 were of normal age grade, and 301 were below normal age grade.

TABLE 46.—Age grade of pupils.

Grades.	Over 6 years, up to 7.	Over 7 years, up to 8.	Over 8 years, up to 9.	Over 9 years, up to 10.	Over 10 years, up to 11.	Over 11 years, up to 12.	Over 12 years, up to 13.	Over 13 years, up to 14.	Over 14 years, up to 15.	Over 15 years, up to 16.	Over 16 years, up to 17.	Over 17 years, up to 18.	Over 18 years, up to 19.	Total by grades.
I.	0	0	4	3	5	2	2	2	3	1	0	3	3	28
II.	0	0	1	3	1	8	7	7	6	10	4	7	2	58
III.	0	0	1	0	3	9	3	9	12	9	3	1	0	50
IV.	0	0	1	0	0	7	4	9	12	11	9	2	0	55
V.	0	0	0	0	0	2	2	5	13	12	11	1	1	48
VI.	0	0	0	0	0	1	0	3	10	10	9	6	2	41
VII.	0	0	0	0	0	0	0	0	1	7	4	4	2	18
VIII.	0	0	0	0	0	0	0	1	3	6	2	1	0	13
Total of ages.	0	0	7	6	9	29	18	30	60	66	42	25	10	311

Industrial schools have sometimes attempted to follow the traditional system of public schools, usually with unsatisfactory results. This is true of the Alabama industrial schools for white children. These institutions should adapt their study programs so far as possible to the character and prospective lives of the inmates. According to a leading authority¹ the course may properly include oral and written English, drawing, arithmetic, and simple accounts, and should be administered directly in connection with the vocational pursuits of the inmates.

(c) *Social Education.* The industrial school should be organized in such a way that it can combine the influences of the home and the religious institutions. The best modern practice utilizes the cottage plan of living at these schools instead of the large dormitory system such as is used now in Alabama. The life and work of the institution should be centered about this cottage life and "so conducted as to lead to the formation of a body of useful habits." It is important to classify the children so that the relatively uncontaminated shall be kept safe from contamination. This can be accomplished by using the cottage plan.

¹ Dutton and Snedden, *Administration of Public Education in the United States*, p. 453.

(d) *Vocational Education.* Many industrial schools have failed in their educational purposes because they have attempted to make the school more or less self-supporting through the labor of the children. At the present there is a demand in some quarters of Alabama that the State's child-caring institutions be placed on a self-supporting basis. It would be well for the advocates of this policy to study carefully the experiences of other institutions of a similar kind before committing the State to this questionable policy.

The best institutions have given up productive labor except so far as teaching the inmates trades and vocations that can be followed for self-support after leaving the school.

Purpose of the school for defectives.—The school for deaf mutes, for the blind, or feeble-minded, is organized for the custody and education of unfortunates who have inherited or acquired a variety of physical or mental defects. The State has taken upon itself to do what the home is unable to do for these children, namely, to prepare them for self-support, or at least, make an attempt toward developing them as useful members of society. To teach the deaf mute and blind requires the highest skill of experts. Their education must combine all phases of physical, intellectual, social, and vocational education. Although, of course, in quite a different combination, it is physical and mental defectiveness rather than waywardness that must be considered and overcome.

Educational needs of the Alabama industrial schools.—Little need be said on this subject as it has been well treated in the reports referred to above. However, this much may be added:

(1) *The Alabama Boys' Industrial School* is hampered in its vocational work for lack of equipment, most of what is now called equipment being mere junk. What is worse, low salaries have forced the vocational instructors out of the school. This must be remedied. The ordinary school work of the institution is in no wise correlated in the vocational work of the school and follows the old-line disciplinary order of things with too frequent and unnecessary resort to corporal punishment. The administration of the school is efficient, but is much hampered by use of cheap, unskilled labor. This school receives an appropriation of \$12.50 per month for each inmate, which is very low in comparison with what is paid in many other States. The appropriation should not be less than \$20 per month for each inmate.

(2) *The State Training School for Girls.*—This institution has recently been moved from Birmingham to a 500-acre farm some 15 miles away from the city. The school is under excellent management, but, like the school at Eastlake, is in urgent need of buildings and equipment. This school, too, would do well to adopt the cottage plan

of organization at once and to reorganize its curriculum as suggested above, on the plan of correlating the cultural subjects with the vocational work of the school and thus eliminating much of the old public school course.

This school likewise receives \$12.50 per month for each inmate. Its amount should be increased to \$20 per month, and special appropriations should be voted for cottages and new equipment.

(3) *The Reform School for Juvenile Negro Lawbreakers.*—Much praise could be given the plan and management of this school, which does its work in a genuinely industrial spirit, but the school is too meagerly supported to accomplish as much as it could do if properly supported. The institution draws \$7 per child, with an additional allowance of \$2 per month for salaries. Because of this indifferent support real educational work is largely lost in an effort to make ends meet economically. The agricultural work is exceptionally good, but little has been done in the trades because the school has practically no equipment for this type of work. The purely cultural education is very limited. The school has no classroom facilities; the school's auditorium, provided with opera chairs, is used in lieu of a regular classroom. Of educational equipment, there is practically none. Worse yet, one teacher only (and this one loaned to the school by Montgomery County) endeavors to teach the 300 children the rudiments of English, writing, arithmetic, etc. It is, of course, humanly impossible to do anything like effective teaching under such conditions. This industrial school is worthy of the best kind of support. The amount invested by the State ought to be increased to at least \$15 per month for each inmate, inclusive of salaries.

(4) *Schools for defective children.*—The Alabama School for the Deaf and the Alabama School for the Blind are both located at Talladega, as is also the Alabama School for the Negro Deaf and Blind. The schools are all under one central administration and appear to be efficiently managed. Because of the increased cost of living and the necessity for expert teaching, these schools are now hampered under increasing difficulties. The present appropriation is \$230 per year for each pupil. Out of this amount must come funds for repairs, equipment, and possible new buildings. On the basis of what many other States invest in this type of education, Alabama should appropriate about \$400 per year for each pupil. An additional appropriation should be made to take care of urgently needed repairs and equipment.

A school for the feeble-minded.—Alabama has no provision for the care of those unfortunates who are commonly known as feeble-minded. Feeble-minded children can be found in some of the public schools, in the industrial schools, in the almshouses, in the insane

asylums, and in homes where there are no facilities for their proper care. This deplorable condition requires immediate remedy. The survey committee accordingly earnestly recommends that the present legislature take the necessary steps to organize such an institution and to make liberal provision for its maintenance.

Administration of the child-caring institutions.—All of the above-mentioned institutions are in a broad way educational; but they partake also of many social features which lie beyond the ordinary experiences and practices of the professional educator. To leave their administration wholly to the educators would be unwise, as has also proved the case where the schools have been managed wholly by the so-called social experts. The best type of administration calls for cooperation of the two. All these institutions in the State, public and private, should, the committee believes, be placed under a State board of social welfare, as has also been recommended by the national welfare committee in its report, but with the definite modification that the purely educational work in the schools shall be directed by the State board of education (if created) through its executive official, the State superintendent of education, who shall also be a member of the said State board of social welfare. To this end, there should be maintained in the department of education a division of education for exceptional children, whose director should have immediate charge of education in the above mentioned schools.

Specific recommendations.—The survey committee makes the following specific recommendations for the improvement of the State's child-caring institutions:

1. Organization of a State board of social welfare to have charge of all child-caring institutions in Alabama.
2. Direction of all the educational work of the child-caring institutions to be under the management of the State board of education or State department of education, which shall maintain a specific division for this purpose.
3. Immediate establishment of a school for feeble-minded children.
4. Large increase in per capita support of all these institutions and liberal funds for enlargement and repairs.

Chapter XIV.

ILLITERACY AND ITS ERADICATION.

The prevalence of illiteracy in many States is a poor commentary on the efficiency of the Nation's school system and on the watchfulness of democracy in safeguarding its own future through an educated citizenry. If the public schools had been administered at a 100 per cent efficiency for the past generation, all persons of voting age would be classed as literate now; similarly, there would be no serious Americanization problem now, as night schools and similar educational facilities would have been utilized to blot out adult illiteracy and ignorance of our spoken and written tongue, and history and government, among natives and aliens alike. Never was there a time in history when this policy of indifference and *laissez faire* for the education of this large group of neglected Americans has seemed so near criminal as to-day, when all the human and economic resources of the world are needed for the coming reconstruction in human affairs.

Conditions over the country at large.—The United States, with a population upwards of 110,000,000 people, has nearly 6,000,000 persons over 10 years of age who are unable to read and write, and many who can not speak the English tongue. Of this large army of unfortunates 58 per cent are white persons. Of these 28 per cent are native-born whites and 30 per cent foreign-born whites; 40 per cent are Negroes; the rest—2 per cent—are Indians, Chinese, Japanese, etc.

More than two-thirds of all the illiterates come from rural communities. These illiterates are not limited to any race or to any one section of the country. The colored illiteracy of the South is almost balanced by the ignorant aliens of the North, and the white illiteracy of the great south Atlantic highlands is scarcely greater than the illiteracy in parts of the northern Appalachians.

The illiterates fall naturally into two groups—those of school age and those beyond school age; or, roughly speaking, persons between 10 and 20 years inclusive, and persons 21 years of age and over. For the former group the public schools are directly responsible; for the latter they can not be held altogether responsible, as, in the North at least, many of this group are of alien birth who have never come under the influence of the American public schools. The Nation's duty to its illiterates is twofold.

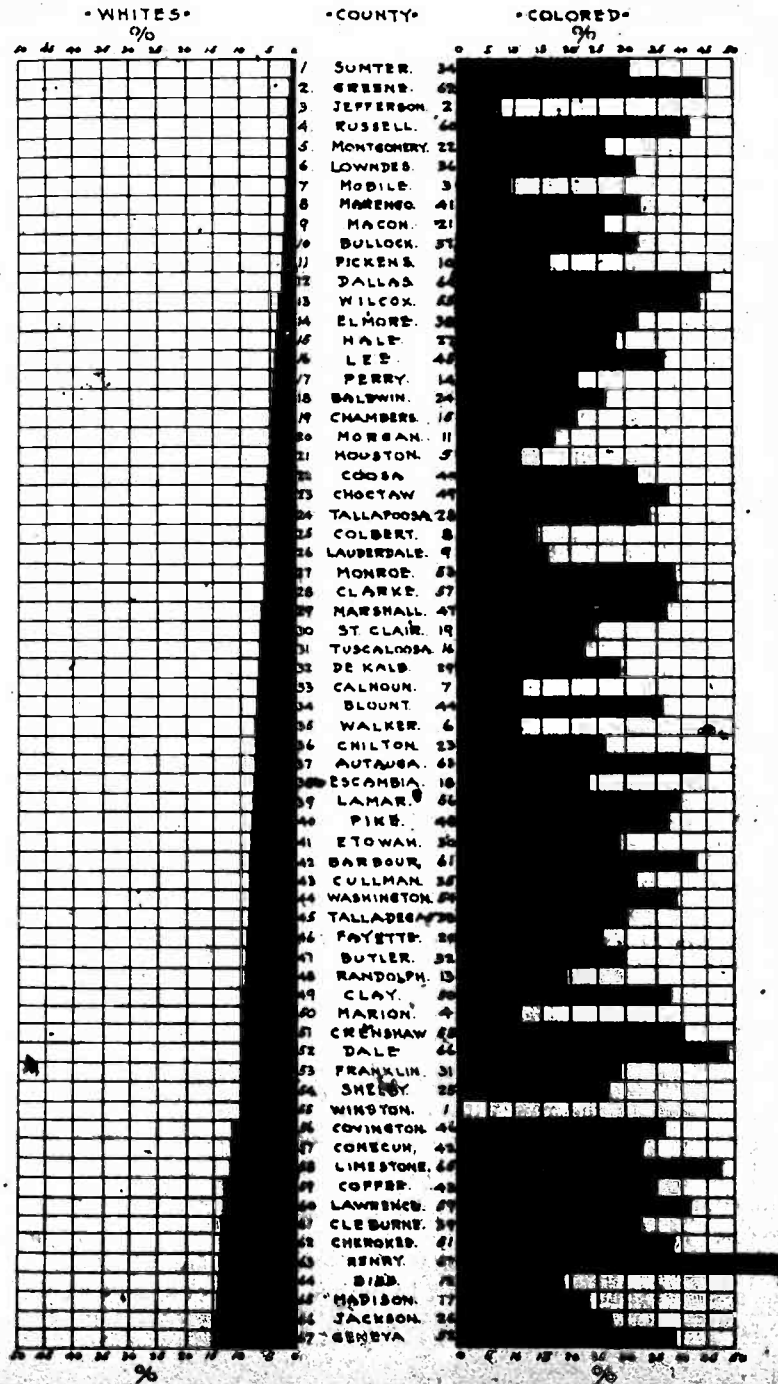


FIG. 18.—Illiteracy in Alabama by counties, 1918. (This includes school population only.)

1. To force every illiterate person of school age into the public schools to remain there in regular day session, or in night school; or in part-time school until this illiteracy has been removed, and they have acquired at least the equivalent of a fourth or fifth grade education; and

2. To place at the disposal of all illiterates above 21 years of age educational facilities that will make it possible for all of them who desire to acquire the rudiments of learning, and thereby be lifted out of the deadening materialism and indifference for country and fellow men that now so often overwhelms them.

Conditions in Alabama.—The State has an excessive amount of illiteracy. The 1910 census ranks Alabama as the forty-sixth State on the basis of largest number of illiterate persons 10 years of age and over. The Federal census and the Alabama biennial school census contain some enlightening data. There are in the State 641,168 persons between 10 and 20 years inclusive, of whom 96,406, or 15 per cent, are illiterate; there are 1,015,070 persons 21 years of age and over, of whom 266,273, or 26 per cent, are wholly illiterate. Of these, 31,661 are males of voting age who are unable to cast their ballots without assistance. In Alabama, also, most of the illiterates live in rural communities. According to the 1910 census the rate of white illiterates dwelling in the city was 2.5 per cent, and in the country 11.5 per cent.

Quite naturally illiteracy is most excessive among the Negro population. Of all the illiteracy in the State 75.4 per cent is among the colored, and 24.6 per cent among the white population. They are grouped by sex, age, and race as follows:

White:

Children, 10 to 20 years of age.....	26,250
Males, 21 years of age and over.....	81,661
Females, 21 years of age and over.....	33,785

Colored:

Children, 10 to 20 years of age.....	70,247
Males, 21 years of age and over.....	92,744
Females, 21 years of age and over.....	106,103

Figure 19 is a graphic commentary on this deplorable situation. The persons in the row with their backs turned can neither read nor write. Against them are shut the doors to literary knowledge and the precious stores of literary treasures that are the common inheritance of all mankind because they do not possess the "open sesame" of school education.

Startling number of illiterates of school age.—The average man has assumed that illiteracy must be limited wholly, or almost wholly, to certain unfortunates who have grown up remote from school, or

under conditions of grinding poverty which has made school attendance impossible. This is incorrect, although illiteracy, no doubt, has had its inception in just such surroundings. Illiteracy in Alabama is not limited to the poor, nor to the remote sections with poor school facilities. The survey committee found plantation owners of good means who were neglecting to send their children to school. These people can not excuse themselves on the ground that there were no schools within reach of them, as the contrary is the fact. One well-to-do planter expressed it thus wise: "I have got along without any book learning myself, so I guess the children can too; besides, if I sent the youngsters to school, they might come to

•TOTAL NUMBER OF ILLITERATES•
 •10 TO 21 YEARS•
 •1918•



•TOTAL WHITE• 454,478•

•WHITE ILLITERATE• 22,451•



•TOTAL COLORED• 315,327•

•COLORED ILLITERATE• 64,746•

FIG. 19.

look down on their old 'pap.' Such deluded individuals need one's sympathy, but for the sake of future generations they should be dealt with firmly and be made to realize that what they consider their personal rights is no more than perverted license.

A startling number of all the illiterates are of school age, i. e., from 10 to 20 years of age. Table 47 shows this at a glance. Every person of school age should be able to read and write at 10 years of age, yet 19 per cent of all the white children of this age in 1914, and 49 per cent of all the colored, could do neither. This per cent gradually decreases up through the years, but it is very high throughout. Figures for 1916 and 1918 show a slight improvement, but it is clear to see that the school authorities in the State have a stupendous task ahead of them to remove this menace from the schools of the State.

TABLE 47.—Per cent of illiterates of school age in Alabama, by census periods.

Age of illiterates.	1914		1916		1918	
	Per cent white.	Per cent colored.	Per cent white.	Per cent colored.	Per cent white.	Per cent colored.
10 years	19	49	19	47	18.4	47
11 years	14	41	13.5	40	14	41
12 years	11	35	11	36	11.2	36.2
13 years	8.5	29	9	28	9	28
14 years	6	24	5.5	24	5	23.5
15 years	5.75	22	5	21	5	21
16 years	5	19	5	19.5	4.9	19
17 years	4.6	19	4.9	19.2	4.7	18.7
18 years	4	19	4	19	4	18.5

Adult illiterates of draft age.—The country as a whole was astounded at the facts brought to light by the recent war draft. In the registrations for persons between 21 and 31 years of age were found 700,000 young men who were wholly illiterate. These men were unable to read the posted orders of the day or to profit by the printed manuals placed at their disposal by the Government. When called to their country's standard they found themselves handicapped on every hand. From their own testimony they were often hurt and humiliated when they were brought into contrast and competition with other more fortunate fellow soldiers. One young Alabamian, who later learned to read and write during the special drive against illiteracy among men of draft age, writes in this strain:

I am very sorry to say that I didnt get any further than a pralvate but that wasnot my falt. There was many thenses [chances] to advense but I culdnot get aney and the risen [reason] was bourse [because] I culdnot read or write. Everybody should be made lern to read and write.

These lessons from the camps and the trenches have probably gone home to the people as no other lesson has. Several States have already passed stringent Americanization laws to cope with this situation, and many others are contemplating similar action.

The average number of draft illiterates between 21 and 31 years of age, for the United States as a whole, was placed at 7 in each 100 drafted persons. In Alabama it was 17 in each 100 drafted persons.

Work of the Alabama illiteracy commission.—A vigorous campaign which has been carried forward in the State for some time by the State department of education, the State Teachers' Association, and other bodies of citizens culminated in the creation of the Alabama illiteracy commission. This law was enacted in 1915. The commission soon perfected a State-wide organization which has carried on a vigorous and successful campaign for the last four years. Much effective work has been accomplished, particularly among adult illiterates and in the special drive against illiteracy among men of draft age.

But the State evidently has not yet fully grasped its great opportunity and responsibility in regard to this vital question. This is evident in the fact that the State has been willing to throw the burden of financial support for the illiteracy work on the public-spirited people of the State, and has left the whole matter of education for illiterates as wholly optional and voluntary. While good results have been secured, it is nevertheless very doubtful if illiteracy can ever be eradicated unless the State invests liberal funds in the work and places it on a compulsory basis.

Stringent legislation and liberal appropriation.—The present legislature would do well to take the following steps in a final effort to blot out illiteracy in the State. The survey committee specifically recommends that such action be taken:

1. Strengthening the compulsory attendance law in accordance with recommendations in Chapter VI.
2. Enactment of legislation to promote Americanization by requiring school attendance of all persons above compulsory attendance age and below 21 years, who do not now speak, read, and write the English language, equivalent to the requirements for completion of the fourth grade of the public schools; providing for the establishment and maintenance of evening schools and part-time schools for this purpose, which schools shall be under the direct supervision of the State department of education.
3. Enactment of legislation to encourage effective illiteracy work among adults under direction of the State department of education, and maintained by funds voted by the legislature.
4. Appropriation of not less than \$25,000 annually for the next quadrennium for the purpose of making such legislation effective.

Chapter XV.

SPECIAL PHASES OF HOME ECONOMICS TEACHING IN ALABAMA.

Home economics courses needed in the schools.—Nowhere are changing industrial conditions felt more keenly than in Alabama. The Negro servant is rapidly disappearing from the home in many parts of the State, and where still available asks a wage so high that the average housekeeper must forego her services. Moreover, for many years the Negro servant has been so poorly trained in household activities that her services have not been an asset to the home. As Negro help has grown more scarce and inefficient energetic housekeepers have undertaken to do most of the work of house-keeping themselves. They have begun to take a keen interest in its many-sided problems and to desire for their daughters the opportunity to prepare for the responsibilities of the home intelligently, whether it be to perform the household tasks skillfully themselves or to direct others to perform them worthily. To-day all women feel their responsibilities more keenly than ever before, because of the services which they have been called upon to render during the war. Home making is universally regarded as a profession for which conscientious preparation is absolutely necessary. If the schools are not offering girls the opportunity for such preparation their work is inadequate and must be revised upon lines that will measure up to the demands of the hour. For several years home economics courses have had a place in many of the schools of Alabama. It was to study the adequacy of these courses and to determine means of increasing their effectiveness that this part of this survey was undertaken.

Home economics courses established in State schools.—The teaching of home economics became a requirement in the nine district agricultural schools of the State in 1903. Courses in home economics were required in the county high schools in 1907. Montevallo Industrial and Technical Institute for girls has offered courses in home economics ever since its establishment in 1896. Home economics courses have been required or elective in the six State normal schools for a number of years. Four elective courses in home economics were introduced into the University of Alabama in 1917-18. Summer-school courses in home economics have been given at the State uni-

versity, at Montevallo, at the Alabama Polytechnic, as well as at the State normal schools for five years. There are no State records of what has been done in home economics teaching in Alabama in the past aside from the regulations outlined in the courses of study for the State normal schools, the district agricultural schools, and the county high schools.

State regulations affecting home economics.—The State issues special courses of study for the State normal schools, the district agricultural schools, and the county high schools. These courses designate what phase of home economics is to be studied during the term such study is required, and names the textbook to be followed in each case, with the exception of the State normal schools, in which case choice is left to the several teachers. This is the only responsibility or authority the State has assumed in regard to home economics teaching aside from approving the appointment of the special teacher of home economics. Such a teacher must have a certificate as for regular teaching. In addition to this she must have had, in theory, at least, a special home economics course in normal school or college. Instances have been numerous in the past in which home economics teachers have pursued only brief courses in home economics and have had no normal training whatsoever in the subject. This condition arose because of the great scarcity of teachers of the subject when home economics first became a requirement in the State high schools. A similar condition has obtained through the past year, as war demands have drawn home economics teachers into other lines of activity.

Home economics teaching in the State normal schools.—The training of teachers in home economics has received very little attention in Alabama. Courses in this subject are required of all women students in the State normal schools, but so short a time is allowed for these courses that they can not be regarded as teacher training courses. They are planned to give some insight into the purpose of home economics in the schools, and the students who have finished the courses are expected to be able to handle sewing classes or the school lunch in the rural elementary school. However, as there are no entrance requirements maintained and most of the girls have had no previous training in home economics, the courses do not rank any higher than the courses given in the high schools. Brief summer courses in home economics have been offered at all the State normal schools, at the State University, Auburn, and Montevallo. As these have been only six weeks in length, they have been even more inadequate to serve as a means of teacher training. The State normal school at Florence offers one additional year of home economics which is planned as a special course for teacher training. In spite of

the additional year; the time allotment is still scant for the preparation of home economics teachers, but in a State where the supply of teachers of home economics has been so limited it has no doubt served a purpose in the past.

The Alabama Girls' Technical Institute.—The only State institution which is frankly engaged in the preparation of teachers of home economics is the Girls' Industrial and Technical Institute, at Montevallo. The excellently equipped home economics building offers splendid facilities for the development of this work, but unless the work is supported by science courses of adequate strength and salaries are sufficient to retain teachers of highest standing, the needs of the State will not be met. At the present time courses are undergoing a process of development, due to the introduction of the teachers' training course under the Federal Board for Vocational Education. This course has already been lengthened from a two-year course to a three-year course and promises to insure the type of teacher training that is absolutely necessary to the proper maintenance of the courses in the elementary and secondary schools.¹

The Negro normal schools.—The status of home economics in the three Negro normal schools of Alabama parallels that in the other State schools in several respects. Salaries of the teachers are exceedingly low. The teachers' hours are long; equipment is not adequate; and courses are poorly planned, owing to the teachers' lack of preparation.

In the State normal, located in Montgomery, adequate time is given to the sewing courses, but difficulties are experienced in securing materials for the necessary practical work. As a consequence, much repetition of problems that have no educational value is permitted. Courses are not sufficiently progressive. While the girls acquire skill of a sort, they do not progress as they should, nor do they obtain the thorough knowledge of clothing and textiles that a well-planned course should give. This is due in part to a lack of appreciation on the teacher's part of what is most worth while; and in part to a weak yielding to the temptation to provide the children with work which will give them the most pleasure. No facilities are afforded for the study of general housework.

The State Agricultural and Mechanical School at Huntsville is seriously handicapped by lack of funds for the provision of materials, and it has not so big a market for sales of articles prepared in the sewing classes as has the Montgomery normal. However, it has the advantage of supervised housework in the dormitory, and at the present time the teachers are planning an apartment in which housework is to be taught. The cooking classes suffer seriously from the lack

¹ See the recommendation in Chapter XX relating to the Smith-Hughes work in the training of teachers of home economics.

of funds for the provision of materials and have not as full an equipment as will insure thorough practice.

Tuskegee is much better equipped and more amply provided with materials than is either of the other two schools, but it still lacks, as they do, adequate courses in teacher training. This is being in part remedied at Tuskegee this year by the introduction of teacher training classes under the vocational board, and thus promise is given of a better condition in the future. Supervised housework in the dormitories and well-organized work in a practice cottage give the work at Tuskegee an added strength. Tuskegee is also doing much to keep in touch with State conditions and knows the needs of the rural schools where the majority of the graduates will teach.

Wise supervision by one who understands the needs of the State and who has opportunity to see what graduates of these schools are doing in the field is necessary to the future development of the work in the Negro normal schools. The good technical work must be continued. It must be carefully planned and graded. In addition to that, adequate teacher training courses must be developed. Salaries ranging from \$160 to \$400, as the majority of those in the Negro normal schools do range, are not sufficient to secure teachers of ability who will remain from year to year and who will develop into stronger and better teachers by devoting time and continued study.

The responsibility for the development of a better type of home life among the Negroes of the State rests very largely upon the normal schools, where the teachers are trained. As the Negro children are taught the essentials of housekeeping, the future welfare of the State will become permanently assured. Therefore, well-equipped home economics departments and well-trained teachers receiving adequate salaries are of vital importance.

Home economics in secondary schools.—Study of conditions as they exist in county high schools and district agricultural schools reveals the following:

- (1) Salaries of teachers are extremely low; \$630 to \$810 per year; average, \$702. Almost without exception the tenure of office of teachers has been very brief, from one year to six months; in several cases even less. Reports received from 39 schools indicate that 30 teachers have been in their present positions only since September, 1918; 5 for even a shorter period of time; and only 4 a longer period. As is to be expected under these conditions, permanent courses have not been established. The adjustment of the teacher to the situation is only partially accomplished, if at all. The courses are not contributing to the permanent upbuilding of the school and the community. Courses are quite ungraded and students are frequently required to repeat

under one teacher what they have already studied with another. Interest in and enthusiasm for the work is at a low ebb.

(2) The special teacher of home economics is required to teach a full program of any subject or combination of subjects made necessary, because of the smallness of the force of high-school teachers. Thirty-eight teachers reporting teach an average of four other subjects, 11 of them teaching more than four subjects. An average indicates that only 6 hours a week are given to home-economics teaching, while 21 hours are given to other subjects. For many of these subjects the teacher may have little or no aptitude and be entirely without preparation. The burden of preparing for these lessons will be such as to detract seriously from her strength for carrying on the home-economics courses to which she should contribute much of her time and her ability if they are to be successfully conducted. Moreover, she should come to know the needs of the community and the extent to which the girls are being prepared to meet these needs in their homes. This she will not have the time to do when she must prepare for eight or nine periods of teaching a day, especially if she is teaching a variety of subjects.

(3) The equipment in almost all of the State high schools visited is meager. In most of them it is in bad condition. Good working tables, cupboards, and machines are lacking. Teachers report the lack of care of school property and the necessity for replenishing equipment each year. There is little or no provision for janitor service, and conditions are such as to lead to discouragement on the part of the new teacher, particularly when her time is very fully occupied with teaching.

(4) Home economics ranks only as a minor in the course and no outside preparation of lessons is demanded. This does not tend to give it the dignity and rank of other subjects in the curriculum, nor does it permit of the teacher accomplishing that which is necessary to give the girls an adequate appreciation of the principles underlying home making.

(5) Standards of conduct in home economics classes are not high in a majority of the schools. The subject is not recognized nor is it presented as requiring serious study, and the girls are permitted "to enjoy themselves." Studious application and a high standard of accomplishment are seldom found.

(6) Library reference works are almost entirely lacking in the schools. The most energetic teachers supply this need in part by putting their own books at the disposal of their classes, but this by no means furnishes adequate reference reading.

(7) That home economics courses are not functioning in the life of the schools is apparent from the bad condition in which most of the schools are found. The home economics department should be

the center from which better housekeeping for the entire school radiates. This was found to be true in one or two cases. In one school visited the members of the home economics classes are given the responsibility of dusting the principal's office; looking after the condition of the toilet rooms, seeing to the order of the cloakrooms, and arranging and caring for flowers as they are brought into the rooms for decoration. In another school visited the home economics classes were preparing muslin covers for hotbeds cared for by the classes in agriculture, preparing noon lunches for the children, and serving the teachers during the meeting of the monthly institute. Such activities should not be the exception, but should be considered a legitimate part of the work of the department if the teacher is allotted a sufficient time to carry on her work properly and if students are required to do the work of a full credit course.

Located as many of the county high schools are, the children must carry lunches for their noon meal. Only two teachers report that they superintend a lunch that is served regularly to the students. Five report that such a lunch is served occasionally in their schools. The teachers of home economics lose a valuable opportunity for teaching food values and inculcating right habits of eating when they do not assume some responsibility in connection with the school lunch. The members of their classes may not always be able to prepare the lunch, but the teacher can nevertheless supervise its preparation and serving.

(8) Observation of lessons taught revealed the fact that the majority of teachers in the Alabama schools have been *very poorly prepared*. Of 35 teachers reporting, only 11 report special training in home economics; 9 have been to normal school; 14 have been to college; and 8 have been to both normal school and college. Three have had only a high-school education. Their teaching indicates that they have not grasped the real significance of the home economics course, and they fail to give their students an insight into the possibilities of better living. They have not mastered the arts of cooking and sewing, nor have they an appreciation of the necessity for a knowledge of food values and textiles. Lessons are carelessly presented, inadequately supervised, and left without summary or deductions. Standards are so low that the mothers of students must seriously question the value of the work-garments badly designed, stitches carelessly taken, and fitting and finishing poorly done.

(9) Few home economics teachers report any requirement for study or practical work in the home. However, a sufficient number report the interest with which the occasional pupil voluntarily practices at home to convince one of the desirability of making that practice a requirement. Skill can not be secured without practice, nor

can the school adequately teach home making unaided by the facilities which the home itself offers.

(10) In spite of the small salaries the teachers receive, 50 per cent report attendance upon summer school, study in correspondence courses, or other efforts for self-improvement. This is no doubt the result of the high standards which the State has set in this respect and speaks well for the ambition of the teachers, an ambition which should be more generously recognized and encouraged by the salaries paid.

As might be expected, such conditions have not tended to the building up of strong home economics courses in the schools. A majority of the teachers report that their work suffers from lack of equipment; at least 50 per cent feel that not enough time is allowed for the work; 25 per cent deplore the lack of funds for carrying on the lessons. Teachers are discouraged, and frankly state that they do not plan to continue to specialize in home economics teaching. Principals are urgently demanding teachers with special normal training in home economics. They say that at present the schools are "playing at" home economics and that the last two years of the course are practically wasted, since the teachers have not sufficient preparation to give so long a course.

CONCLUSIONS DRAWN FROM THE FOREGOING STUDY.

1. *State supervision.*—The schools in Alabama should have well-organized courses in home economics in charge of a competent and well-paid State supervisor, whose duty it should be to establish standards for home economics teaching, send out constructive plans for carrying on graded courses, visit the schools, pass upon the equipment and teaching, and in every way aid the teachers of home economics. Those counties which employ 12 or more teachers of home economics may desire to have a county supervisor of home economics as well as the State supervisor. A State supervisor should have had a thorough fundamental education and extensive training in home economics education; she should have followed closely modern educational movements; she should have had experience both as a teacher and an administrator; and she should be thoroughly conversant with the needs of the home and the best methods of conducting the household.

2. *Salaries.*—Adequate salaries should be paid the special teachers of home economics, so that the best young women of the State will prepare themselves to carry on the work that is so vital to the homes. Salaries should be sufficient to make it possible for girls to continue their studies in summer schools and special courses, so that they may keep abreast of all that develops in educational methods and scientific research.

3. *Qualification of teachers.*—The standard for the selection of the teacher should be sufficiently rigid to bar all those who have not had at least two years of special normal training in home economics. Just as soon as conditions in the State made it possible, the high-school teachers of home economics should all be required to have had a complete college course, at least two years of which have been devoted to special training in home economics.

4. *Duties of the teachers.*—The home economics teacher should not be required to teach many other subjects in addition to home economics, for she should be allowed time for preparation and for supervision of students' work. It may be necessary for her to supervise the school lunch and to take charge of extension courses as well. This should be considered when planning her schedule.

5. *Course of study.*—There should be a course of study so definitely outlined that it will insure continuity in the work of the school even when a change in teachers is necessary. A State course of study may be made to answer this purpose if local adaptations are worked out. In counties in which a county supervisor is employed, a county course of study following the outline of the State course may be worked out to meet local conditions. The completion of the course of study should stand for some definite achievement on the part of the students. For example, the first course in foods and cooking should train the members of the class to prepare simple meals attractively, using proper food combinations. The first course in sewing should give the girls the ability to prepare all necessary undergarments, using all the simple stitches and the machine attachments, at the same time giving them a knowledge of choice, cost, and durability of the textiles used. Lack of ability to perform any of the tasks outlined in the course should very definitely disqualify the student for credit and promotion.

School equipment.—A school should not be permitted to introduce a course in home economics unless it is prepared to install an adequate equipment that shall meet the approval of the State supervisor. While a fine type of equipment does not insure good teaching, and some very good teaching may be done with poor equipment, that school is not fair to the teacher that does not provide her with tools for the work. Poor equipment too often works to the discouragement of the teacher and the breaking down of her ideals. Four hundred dollars should be regarded as a minimum sum to spend for the initial equipment in a modern high school. This equipment may vary in type according to the needs and size of the school, but it should be something that is easily cared for and that will furnish, in every way, high standards for household furnishings. Its arrangement and care should in themselves be object lessons to the students. A few essen-

tials should be part of the permanent equipment. Lockers for aprons and good cupboards for supplies and utensils are a necessary part of the equipment. These should all be so arranged that they can be kept locked when necessary. There should be a good stove or stoves and adequate plumbing arrangements to supply water for cooking, washing and scrubbing, and to carry off all waste. Blackboard facilities should be supplied and shelves for books and bulletins with cases for filing records. Class records and, if possible, individual records of work pursued should be kept on file in every school, so that the time of the pupil may not be wasted if change of teacher or of policy brings about a change in courses.

7. *Better maintenance.*—Each school which desires to establish a course should be able to give assurance of a definite sum for its future maintenance for the teachers' salary, necessary replacement of equipment, provision of supplies to be used in practice, etc. This sum should be sufficient to obviate the necessity of imposing a personal fee for the laboratory work of the pupils and should relieve the teacher of all responsibility of resorting to sales and other expedients for supporting the department. The preparation and sale of school lunches may be legitimate part of the course, and if carried on should be self-supporting, but must not be depended upon to finance the entire course.

8. *Reference library.*—Good reference books and magazines treating of home economics subjects should be provided in every school where home economics is taught. These should include standard cookbooks, commercial geographies, textbooks treating of hygiene and food chemistry, work on textiles, vocations for women, etc.

9. *Length of laboratory periods.*—Every school should be required to allow laboratory periods of adequate length—that is, from 90 to 120 minutes. A cooking or sewing period of shorter duration, even though more frequent, means an immense amount of wasted time in the purely mechanical processes of getting ready for work and in putting work away. The laboratory periods should not be put after school hours, nor should they always occur at the end of the school day. If the earlier hours of the day have their advantage for some types of studies, they certainly have for home economics lessons in which both mental and bodily activities are required.

Home economics classes in elementary schools.—In a few of the communities visited the attendance at high school is very small, many of the girls leaving school before they reach high-school grade. In such communities it is most desirable that these girls be given the opportunity to study home making in the lower grades. This could be made possible if the teacher of home economics in the high school could devote her entire time to the subject of home economics, having classes in the grades as well as in high school. These courses

should not be introduced until the schools are able to finance them adequately, providing good equipment, assuring sufficient supplies, and paying an adequate sum for the services of the teacher.

Length of courses in home economics.—Until more thoroughly qualified teachers of home economics are prepared in the State, it would seem well to limit the courses in the State high schools to two years. Because of the number of girls who drop out after the ninth grade, these courses should be required in the eighth and ninth grades. The courses required should be full credit courses, five hours per week (three laboratory periods, two lecture periods) demanding outside preparation and practice. The course offered in the eighth grade (first-year high school) should include cooking and housewifery. The course for the second year should take up the subjects of clothing and house furnishing and management. When the schools are organized on the six and six plan, home exercises may well be given in the three years of the junior high school.

At such time as the State shall be able to provide teachers of sufficient training, courses in home economics extending through two additional years should be offered in the high schools. These courses should be optional, but they should be full credit courses.

The high schools of the State should hesitate to introduce courses in home economics which meet the Smith-Hughes requirements unless they are sure these courses are to reach all the girls or that they can furnish teachers for those who are not in the special vocational classes as well as for those who are.

Normal school courses.—The normal schools of the State do well to include a course in home economics for all the women in the normal course, but this course should be made so intensive as to be of real value to the student. Since many young women have entered the normal schools without the previous high-school courses in home economics, the normal courses have not ranked higher than these secondary courses. As high schools give better courses in home economics, and these courses are more general, the normal course should treat the subject from the standpoint of the teacher, placing emphasis upon the educational value of the subject, the methods of presentation, and the relation of home economics to other subjects in the curriculum.

Courses at Montevallø.—The technical courses in home economics carried on at Montevallø for so many years should be continued and should offer to all young women the preparation necessary for intelligent home making. These courses should continue to be correlated with the courses in general science in order to make that preparation as broad as possible.

Since Montevallø has been provided with excellent facilities for teaching home economics and has a plant of sufficient size to develop

normal courses as well as to carry on the general preparation for home making, the work there should be strengthened in every way. The choice of teachers should not be limited by small salaries; the courses in science and other related subjects should be built up; sufficient opportunities for practice teaching should be maintained under close supervision; and State needs should ever be kept in mind. Teachers of home economics should be prepared for grade schools, for county high schools, and for district agricultural schools, and the demands that schools of that type make upon the teachers should be constantly considered.

Courses at the State university.—The home economics courses offered at the university should be based upon the high-school courses. The students who enter these courses should have completed the courses which the high schools offer in home economics and be prepared to enter upon college courses in the subject. These courses should deal with the scientific, economic, and social phases of the subject, and should offer opportunity for experimental work.¹

¹ For recommendations regarding the establishment of a division of home economics at the Alabama Polytechnic Institute, see Chapter XXI.

Chapter XVI.

HEALTH AND PHYSICAL EDUCATION.

Introductory statement.—Nearly every one knows that the selective draft rejected about one-third of the men as physically unfit for Army service; not so many know why they were rejected; fewer still know how to remedy the defect. An analysis of the causes of rejection shows clearly two things:

1. In most cases the causes of rejection were not recently acquired defects or disabilities, but rather defects and disabilities dating back to childhood.

2. The majority of the defects and disabilities should have been prevented or remedied by proper attention during school life.

A significant reduction in man power is the price the Nation pays for indifference to the physical upbuilding of its children during school life.

In addition to this complete loss through defectives, there is the further fact brought out in the training camps that comparatively few of the men were well trained physically. Much time that was needed for military training had to be devoted to physical development that should have been taken care of during school life.

Comparison of the records of rejection in the different States show that Alabama does not vary markedly from the average. The combined figures of the local boards and the camp surgeons show that 25.79 per cent of Alabama's examined men were rejected as totally unfit for military service. Most of the States run between 20 and 30 per cent, a majority showing under 25 per cent. Alabama also had 8.92 per cent fit only for limited service. Therefore 34.71 per cent of her offered men were unfit for full military service.

It is the purpose of this study of health and physical education in Alabama to point the way, as well as may be, by which the schools may contribute effectively to the physical unbuilding of the children.

It was realized from the first that it is essentially a rural problem. Consequently, it was necessary to concentrate the studies upon rural conditions and rural work as affecting health and physical education.

But it was early found that practically no work along lines of health and physical education was going on in rural Alabama, so that there was no available source from which to draw the facts. It was accordingly necessary to go into the field and gather the facts at first hand.

Methods of procedure.—Two methods were adopted. One was to have a number of children examined in each county, the examinations being conducted by the county superintendents of education, assisted by the local physicians. It was planned to have about 150 children examined in each county, a third of whom were to be colored. April 9 was set for the examination day, and was generally observed.

The examination was reduced to its simplest form, and included only teeth, tonsils, glands, anemia, hookworm suspects, and time lost from school on account of illness. The results are shown in figure 20.

The other method adopted was to select a single county, as nearly typical as possible, and here put on a more intensive study. Cham-

HEALTH CONDITION OF ALABAMA CHILDREN

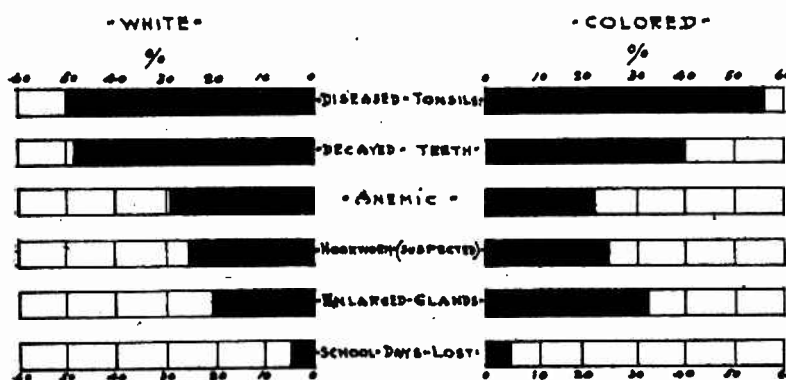


FIG. 20.—These are the results of a health examination of the children in three rural and village schools—2 white and 1 colored—in each county in the State.

bers County was selected for this purpose, and under the auspices of the county board of education, an expert was engaged for three months as school health supervisor.

I. HEALTH SUPERVISION.

Child conservation involves three phases—the school, the preschool, and the prenatal. It involves the acute communicable diseases, which include measles, mumps, chicken pox, etc.; and the chronic endemic diseases, as malaria; the intestinal diseases, as typhoid and hookworms; the social diseases, as tuberculosis; the diseases of heredity and neglect, as errors of refraction, faulty dentition, diseases of the skin, scalp, etc.; and over and above all of that, it involves not only the *sickness* side, but the *health* side as well, the means and methods of promoting positive health and vigor. A large array of considerations this, the importance of which is quite generally recognized.

It is not only a large array of considerations, but striking at them from various angles is an almost equally large array of agencies, of one kind and another, endeavoring to meet the needs. Among these agencies which are now operating in Alabama, or have operated in the recent past, or expect to be operating in the near future, may be mentioned boards of education, boards of health, tuberculosis associations, woman's committee of the council of national defense, woman's clubs, dental associations, industrial organizations, and private philanthropy. But chief among these agencies are the boards of education and the boards of health.

Specific health functions of boards of education and boards of health.—From the evidence in hand, these two agencies are both hampered in the performance of their proper functions by not having their respective duties and responsibilities in the matter of child conservation clearly defined. While cooperation between the board of education and board of health is at all times desirable, it should be remembered that each has its proper health function to perform in the schoolroom, and that neither can shift the responsibility to the other. The diseases of heredity and neglect belong strictly to the school, and the responsibility can not be shifted. The health department may point out defective teeth, but it is the teacher who has to get the defects corrected and create the spirit of emulation for good, sound, clean teeth. The doctor or the nurse may point out drooping shoulders, but it is the teacher who has to brace them up and keep them braced up from day to day till a habit is formed. In fact, the health department, except in the cities where they have an adequate corps of nurses and doctors, depends upon the teachers for the "follow-up-work," and properly so, for it is not the work of an hour or a day; it is the work of school life to form proper habits.

The best all-round health conservation work in the State, exclusive of the Tuskegee Collegiate Institute work, is in Birmingham. Here the board of health and board of education have "had it out" and have agreed upon their respective duties and responsibilities. The board of health; it is recognized, has entrée to the schools to carry out its own particular functions, namely—to control the communicable diseases. The board of education, on the other hand, has supervision of the diseases of heredity and neglect, though not defined in so many words. Stated in parallel the line of cleavage in Birmingham is, and should be generally, about as follows:

BOARD OF EDUCATION.

The diseases of heredity and neglect, as errors of refraction, decayed teeth, accumulations of tartar leading to diseased gums, and pyorrhea; accumulations of wax in the ears; dirty teeth, skin, nails, and scalp;

BOARD OF HEALTH.

The acute communicable diseases, as diphtheria, measles, mumps, scarlet fever, whooping cough, smallpox, chicken pox, rabies, cerebrospinal meningitis, infantile paralysis, and so on.

skin parasites, as pediculosis, scabies, ring-worm; malnutrition, due to errors of diet, including kind, quantity, and preparation; and errors of habit, as too little sleep, too great activity, etc., postural defects, as drooping shoulders, loose and slovenly gait, etc.

Nor is it enough to suppress disease—positive health should be promoted—strength, endurance, resilience should be wrought into the fiber of the pupils. To this end physical environments should be considered, such as buildings, including lighting, heating, ventilation, seating, facilities for cleaning, etc.; grounds—including size, condition of drainage, grading, conditions of upkeep; playing—as apparatus, organization, supervision, etc.

Nor is that all. Actual practice shows that physical defects run in families, so that health supervision can not progress very far before the supervisor and the teachers and pupils, as well as parents, come to think in "family units" and "heredity." It is probable that errors of refraction are generally due to the size and shape of the eye—a purely hereditary trait. Drooping shoulders is not always a matter of habit. Even the oft-quoted high arch and deflected septum may not always be a matter of adenoids.

Again, no sooner do we begin to think of family traits than we take into account mental traits, noting that in some families most or all of the children are particularly bright, in others they are particularly dull, in others they are problem cases of one kind or another. So that it is impossible to separate physical traits and mental traits and heredity.

The chronic endemic diseases, as malaria.

The diseases of intestinal origin, as typhoid, hookworms, cholera.

The social diseases, as tuberculosis, the venereal diseases, etc.

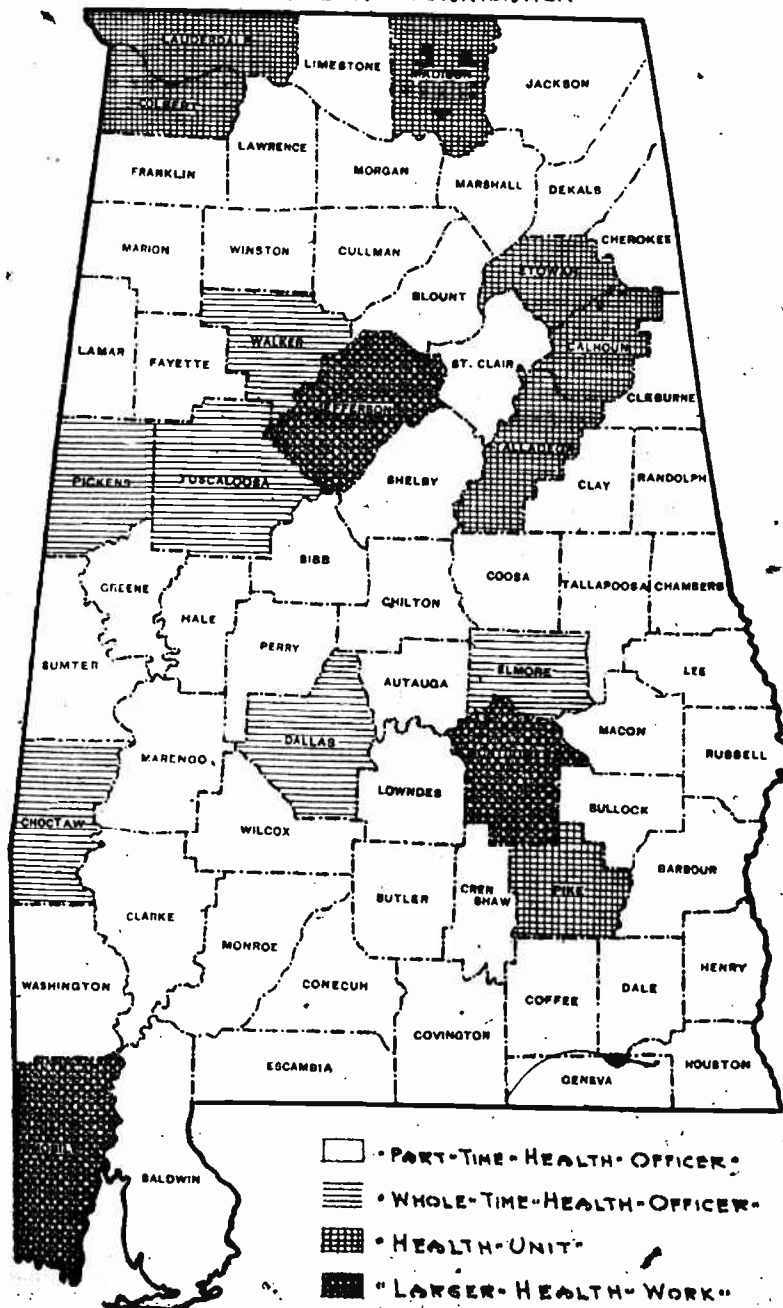
The above groups are those that belong strictly to the health organization. It will be noted, however, that this line of cleavage leaves unplaced that phase of child conservation extending from conception to entrance into the schools. It is this period that covers the most critical time of existence and calls for prenatal supervision, as in the training of midwives, providing literature for expectant mothers, and pre-school supervision covering the six tender years in which the death rate is highest and when disease resistance is lowest. This phase logically belongs to a children's bureau, either independent or as a subdivision of the State board of health.

It will be noted that the groups are fundamentally different; that the board of health group affects masses. The board of education group affects individuals and families. Effective control of the one is basically a restraining process, of the other a training and breeding process. The one has to do more with prevention, the other with correction and instruction. The one involves intermittent pressure activities, alternately high and low, while the other involves eternally high-pressure activities to achieve the best results.

Present health status in the State.—It would be foreign to the purposes of this report to enter into the workings of the State and local boards of health further than is necessary to make clear the proper relationships between the educational and health organizations; and to make equally clear the line of cleavage between the two.

Efficient health organizations are products of the dense aggregations of population of the cities. In rural communities they are exotics, difficult to get started, and difficult to keep alive. In the State of Alabama, the three counties Jefferson, Montgomery, and Mobile, with their contained cities, constitute about one-sixth of the

• SHOWING • DISTRIBUTION • OF • DIFFERENT • FORMS •
• OF • HEALTH • ORGANIZATION •



population, but they pay for public health purposes six times as much as the 52 rural counties with part-time health officers, and with an aggregate population of over a million and a half. Two-thirds of the population of the State do not have any practical working health organization. And that, let it be borne in mind, is the very portion of the population (the rural) that this study intends to reach. It is patent that if these counties are to have any health supervision in their schools at all, it must be under the auspices of the board of education.

The board of health is proceeding as rapidly as it can with the funds at its disposal, in organizing county health units. About a dozen counties are already organized, or in the process of organization. But that they have a big task awaiting them to control communicable disease is shown by the following brief summary of the status of a few more common communicable diseases.

Malaria.—According to recent estimates furnished by the United States Public Health Service, there are, in the State of Alabama, 157,000 cases of malaria a year, and each one is sick upon average one month. This is over 13,000 years of illness. Compute, if you can, the cost of taking care of 13,000 persons sick with malaria, year in and year out. In computing the cost to the State, not only doctors and medicines, and patent medicines, must be taken into account, but the loss of time. The loss of time alone is over a half million days. It is true that not all the cases are within the laboring age, but many of these require the care of some that are. The disease causes the loss of time, not only of the sick, but also of the attendants. Reduce this last item to its money value and it will be seen that malaria—one disease alone—is costing Alabama more merely in lost time than the State is paying for all its health protection. This means the combined appropriations for the State board of health; for Montgomery, Birmingham, Mobile, and all other cities that have boards of health; for the health units of Colbert, Lauderdale, Madison, Calhoun, and Talladega Counties; for the whole time health officers of Walker, Elmore, and Pike Counties; and all of the part-time health officers of the rest of the State!

Typhoid fever.—The typhoid death rate in the United States has gradually decreased with the application of public health measures. In 1900 the death rate was in the registration area,¹ about 35 per 100,000 of population. This has gradually come down, until in 1916 it was only 13.8 per 100,000 population.

¹ The term "registration area" of the United States embraces such States as are getting 90 per cent or more of all deaths properly reported, according to State laws; and such cities in other States known as "nonregistration States" as conform to the same requirements, but under city laws. The registration area embraces (1910) 70.2 per cent of the whole population, and 44 per cent of the area. The State of Alabama is not in the registration area, but the cities of Montgomery, Mobile, and Birmingham are.

In 1917 the death rate from typhoid fever was 28.2 per 100,000, which is a little higher than the death rate in the registration area of the United States 19 years ago, and nearly three times as high as it was in 1916 (the latest available report).

By the application of well-known laws of sanitation, the death rate from typhoid fever in the United States registration area has been reduced from 35 to 13.3, or about 63 per cent. It is not too much to expect that a similar reduction can be realized in Alabama.

Hookworms.—The hookworm belts the earth in a zone about 80 degrees wide. Alabama is contained wholly within this zone. How prevalent it is may be estimated from the records of the Rockefeller Sanitary Commission which operated in this State from 1910 to 1915; and from the Army records of natives of Alabama who served on the Mexican border; and from the recent State-wide examination. In this State-wide examination some 5,000 children were examined, and the local physicians rated as suspects 27 per cent. Of those that served on the Mexican border, according to figures quoted by Dr. McCormick, of Mobile, 60 per cent were infected. The Rockefeller Sanitary Commission examined microscopically 53,643 persons, of whom 23,403 were found to be infected. These examinations were made in all counties in the State except Coffee, Conecuh, Escambia, Perry, and Pike. The Army records, coming as they do from every walk of life, and representing the ages chiefly between 21 and 31, ought to give a fair average of its prevalence at that age. But it should be remembered that hookworm infection is a disease of bare-foot age; that the infection reaches its maximum of intensity somewhere between 10 and 15 years of age; and that after the habit of constantly wearing shoes becomes established there is an automatic tendency to recover; and it should be remembered, further, that these men in the Army had long since been inducted into shoes. The evidence, therefore, is that the rate of incidence among the soldiers is considerably less than among the children and youths. Upon the whole, it seems more than conservative to estimate that one out of every four children of school age in the State is infected. From which it is seen that there are some 140,000 children of school age suffering from hookworms in some degree or other.

The hookworm disease, like typhoid fever, is preventable, and like typhoid fever is prevented by proper disposal of human waste.

Tuberculosis.—Tuberculosis may be called a social disease. It is probably the best yardstick we have for measuring general social conditions. Its death rate is influenced by poverty, housing conditions, alcoholism, nutrition, industrial environment, occupations, the communicable diseases, such as measles, pneumonia, whooping cough, and chronic endemic diseases, such as malaria, and above all, by that

group of troubles which may be roughly classified as diseases of heredity and neglect.

The death rate from this disease in Alabama in 1917 was 147; for the registration area of the United States in 1916 it was 141. It is to be noted in this connection that Alabama is not a tuberculosis health resort, as are some other States, e. g., Arizona, California, Colorado, and New Mexico. Many people gravitate to these health resorts and die every year, and their deaths are charged to the city or State in which death occurs. The death rate for Alabama is probably actually lowered by this gravitation to health resorts. These facts, taken together, would seem to indicate that the general conditions that make for tuberculosis are rather worse in Alabama than in the registration area for the United States.

Veneral disease.—The number of cases of venereal disease in Alabama is unknown. The most reliable estimate is based upon figures from the Army. Those figures were obtained as follows: It will be remembered that the local boards rejected the halt, the lame, and the blind (this was the custom at first), accepting only those that were locally rated as "fit." After the culling process had been completed, those accepted were sent to camp. Here these select men were examined, and it was found that the venereal disease rate of the men from Alabama was 8.68 per cent, second highest in the United States, being surpassed only by Florida. (See leaflet issued by the U. S. Public Health Service.)

Recommendations concerning the State board of health.—It is obvious from this summary that the State and county health boards have a gigantic task in the control of these and other communicable diseases. It is equally obvious that there can be no full and adequate control of the health of school children until the State and county health authorities are financed in a way to enable them to control effectively the communicable diseases. It is this fact that justifies this survey in making this brief recommendation relative to the State board of health. The recommendations for the State board of health are more of intensity than kind. One of the chief functions of the board is to foster local health organizations. This it is doing as thoroughly and rapidly as its funds will permit. The appropriation that the board is asking for, \$150,000, though it is a great advance over its present appropriation, is very modest when compared with the needs and with what some of its neighboring States are doing. Florida, for instance, with only one-third the population of Alabama, devotes \$150,000 to public health. It is to be hoped that the legislature will see its way clear to give the State board of health financial support commensurate with the importance of this branch of government. And here is work in plenty for the health organizations, even when they attain their full vigor.

The work in Chambers County.—Before proceeding to a consideration of diseases of heredity and neglect, it is needful to review the findings in Chambers County, for it is upon them that much of the information rests. The first school check up was the Lafayette school. It was found that, physically, the children rated especially well. So well, in fact, that it seemed more than accident. See figures 21 and 22, comparing heights and weights of the Lafayette children with the norm. In making this first comparison, the sexes were not separated and the norm here referred to was arrived at by taking the mean between the sexes of the norms compiled by the Children's Bureau. In later studies, the sexes were separated, but

·CURVE· SHOWING· SUPERIORITY· IN· HEIGHT·
·OF· LA· FAYETTE· CHILDREN· COMPARED· TO· THE· NORMAL·,
·SEXES· TOGETHER·

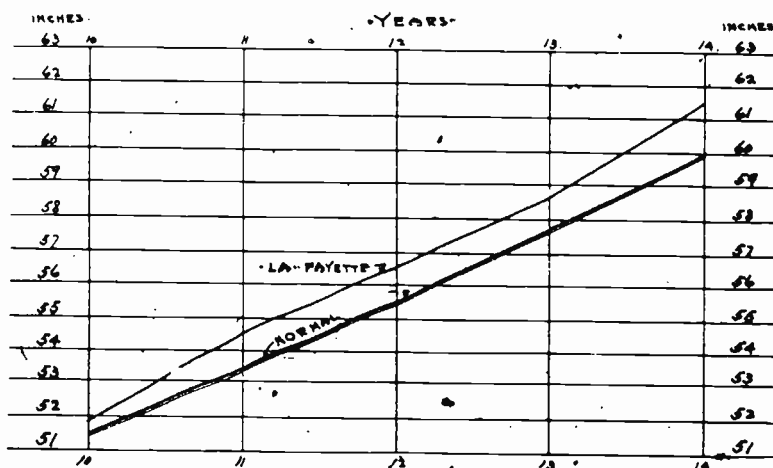


FIG. 21.

the mass results were not changed. Seeking the cause of the physical superiority of the children of Lafayette, it was recalled that the manager of the cotton mills at Lanett had said that his help was recruited from the farms; that it is the less prosperous farmers that gravitate to the mills; that the prosperous farmers remain on the farm, while those that find the farm too rocky a road are the ones that decide to try the mills. Was this physical superiority of the Lafayette children due to this process of segregation? Had the less fit gravitated to the mills and left only the stronger at Lafayette? Inquiry was instituted and it was learned that there are few or no white tenant farmers in the Lafayette region. Further inquiry elicited the fact that the white people in that section are

generally prosperous and substantial. One man who had been in business there for two years stated that this was the only place he had ever seen where he would be willing to take any white man's note.

If this process of segregation was the true explanation of the physical superiority of the Lafayette children, it necessarily fol-

CURVE SHOWING SUPERIORITY IN WEIGHT
OF LAFAYETTE CHILDREN COMPARED TO THE NORMAL
SEXES TOGETHER

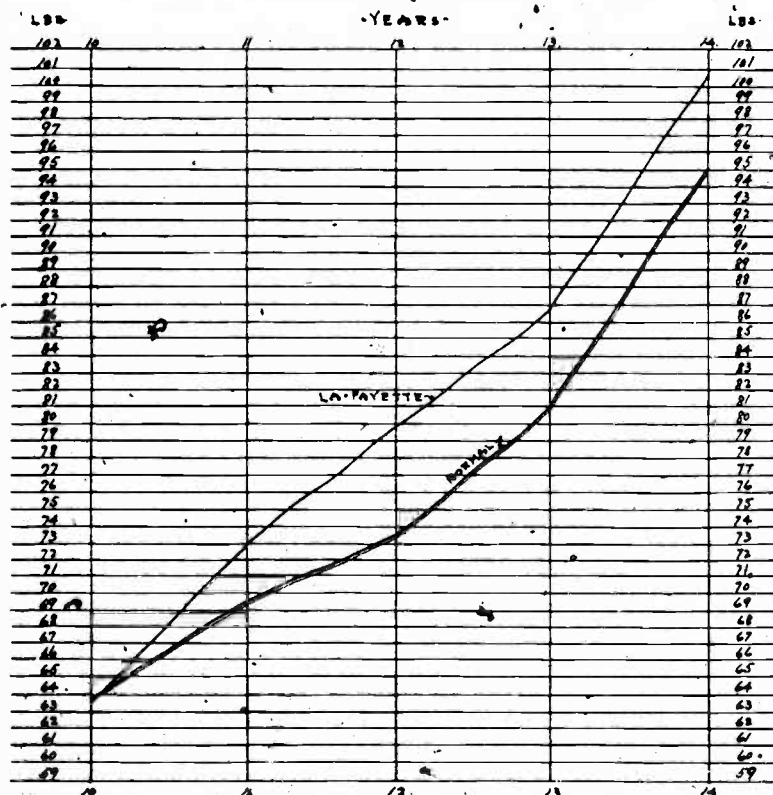


FIG. 22.

lowed that there would be found a corresponding physical inferiority at the mills. The Shawmut mill, built in 1918, was next examined. The differences in weight are too pronounced and uniform to be accidental. The same scales were used, and, age for age, the children of Shawmut are not so heavy as those of Lafayette. Their heights were also compared. The conclusion is obvious—the children of Shawmut are not so tall as those of Lafayette.

Comparison of La Fayette children with Shawmut children, as to weight and height.

Ages of children.	Average weight, in pounds.		Average height, in inches.	
	La Fayette.	Shawmut.	La Fayette.	Shawmut.
Ten years of age.....	63.7	59.4	51.80	50.50
Eleven years of age.....	73.0	71.4	54.55	52.89
Twelve years of age.....	79.7	73.4	56.58	55.45
Thirteen years of age.....	90.4	81.0	58.68	56.40
Fourteen years of age.....	100.5	95.0	61.48	58.80

That there is physical inferiority of the mill population has been generally recognized. The cause of it has been ascribed, by common consent and in the absence of evidence to the contrary, to the deleterious influence of the mills. Dr. Foght has shown, in the case of certain mills studied in South Carolina Bulletin, 1919, No. 6,¹ that the inferiority existed prior to coming to the mills. Dr. Foght's method of study was by individual inquiry and tracing the cases back to their previous homes. These observations in Chambers County were made without knowledge of these studies, and were based upon a study of averages, rather than by individual inquiry; and yet the same conclusions were reached, namely, that this inferiority existed prior to coming to the mills. The conclusion is therefore irresistible that the mill did not produce the underweightness and underheightness of the children.

With the fact of physical inferiority before coming to the mills disposed of, it is pertinent to inquire what actual effect the mill environment has upon these children. Is their physical condition further impaired; does it remain stationary; or does it improve after a few years or a generation? Fortune favored the investigation in that there are mills of several ages. The Shawmut mill above referred to was built in 1908. Its population is not so stabilized as the older mills. The Lanett mill, built in 1893, is now 26 years old. The population is fairly well stabilized, not more than 10 per cent at the present time being of the floating type. The Langdale mill is the oldest of the group, but it is small and does not lend itself well to the study of averages.

It should be noted that the children here studied have never worked in a cotton mill, and that among them are a negligible few whose parents are not even connected with the cotton mills. It should be noted further that above 14 years old complicating factors arise, such as untimely dropping out of school. Accordingly, comparisons are based upon the 5-year group including 10 to 14 years of age, where

¹ A Half-time Mill School. By H. W. Foght. Washington, Government Printing Office, 1919. (U. S. Bureau of Education. Bulletin, 1919, No. 6.)

numbers are largest and where comparisons can be made with most uniformity. The Lanett school, 26 years old, was next examined, and the results compared with Shawmut as follows: At 10 years old, the average height of the children at Lanett, the older mill, is nearly 2½ inches greater than the children at Shawmut, and this difference is maintained with a fair degree of uniformity to 14 years of age. (See figure 23.) Weights: At 10 years old, the children of the older mill, Lanett, average 1 pound heavier than the children of the new mill. They practically come together at 11; at 12 the older mill children are again the heavier; at 13, there is over 4 pounds difference, and at 14 there is over a pound difference, all in favor of the older mill. (See figure 24.)

• CURVE SHOWING SUPERIORITY IN HEIGHT •
• OF CHILDREN OF OLD MILL (LANETT) OVER CHILDREN OF NEW MILL (SHAWMUT) •
• SEXES TOGETHER •

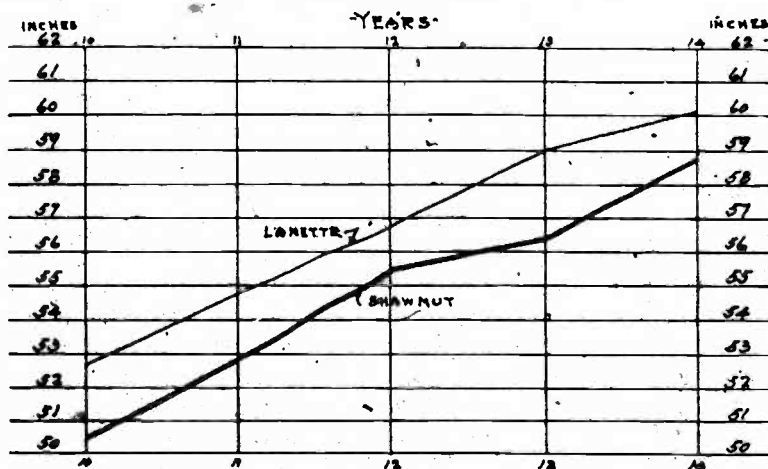


FIG. 23.

Separating the sexes and eliminating extremes did not in a single instance change the results. The mass facts are, first, that the children of LaFayette, year by year, are taller and heavier than the norm; second, that the children of Shawmut (the new mill) year by year, are not so tall and not so heavy as the norm; third, that the children of Lanett, the older mill, are taller and heavier than the children of Shawmut, the newer mill.

Comparing now the two old mills, Langdale and Lanett (see figures 25 and 26), it is interesting to note that, in spite of the erratic curve of Langdale (the smaller school), there is no essential difference in height and weight, and that both of them play round and over the norm. All of which, taken together, suggests that the limit

of improvement under present conditions has been approached if not indeed reached, and that no further improvement in height and weight can be expected till some new factor has been introduced.

Diseases of heredity and neglect.—Passing now to the "diseases of heredity and neglect" let us take the eyes. Of the total number of Army rejections we learn that 21 per cent of the rejections in the first

• CURVE SHOWING SUPERIORITY IN WEIGHT •
• OF CHILDREN OF OLD MILL (LANETTE) OVER CHILDREN OF NEW MILL (SHAWMUT) •
• SEXES TOGETHER •

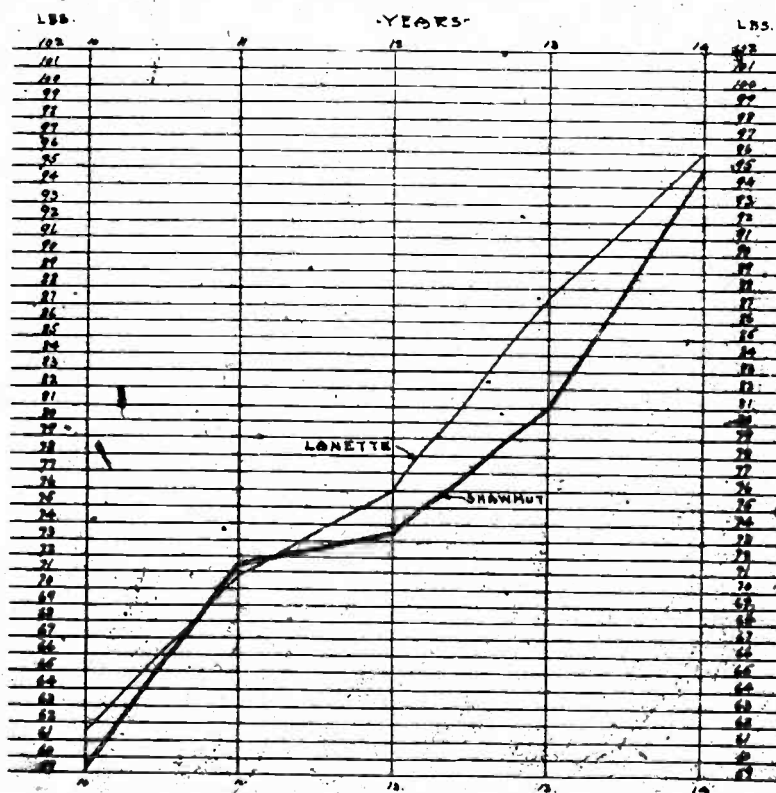


FIG. 24.

draft were based upon eye troubles. The total rejections were, it will be remembered, about one-third. Twenty-one per cent of these rejected for eye deviations of one kind or another would mean that 7 per cent of our population is suffering from some form of eye trouble of sufficient seriousness to disqualify them for military duty. These deviations from the normal consist mostly of errors of refraction. These "errors of refraction" consist of near-sightedness, far-sighted-

ness, astigmatism, and so on. Translated into common English they mean that the pupil can not see as well as he should. Sometimes it is one eye, sometimes both. If one eye is fairly good and the other eye out of "kilter" the good eye does the work, while the other literally goes to sleep on the job. Actual blindness of one eye frequently comes from disuse, owing to an "error in refraction." Many chil-

• CURVE SHOWING SUPERIORITY IN WEIGHT •
 • OF LANETTE (MILL 26 YEARS OLD) CHILDREN COMPARED TO LANGDALE (SEVERAL YEARS OLDER) & NORMAL •
 • SEXES TOGETHER •

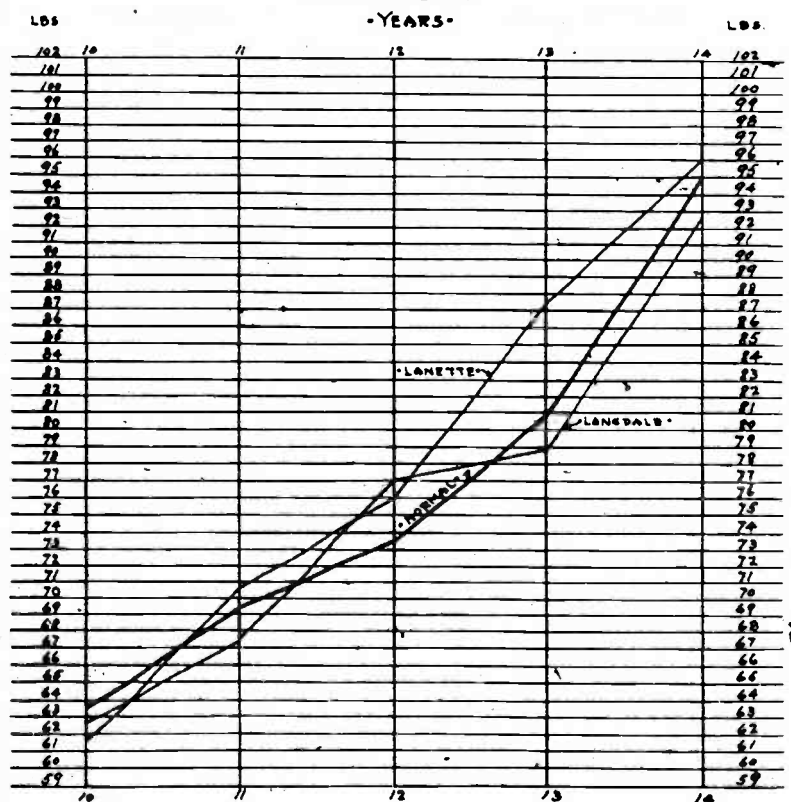


FIG. 25.

dren examined in Chambers County have actually lost the vision of one eye through disuse. Some have not quite lost it, but almost, visual acuity ranging around 2-20 to 8-20. Another point not generally understood, when a person loses the vision of one eye, so that there is nothing to give it direction, it is likely to go "crossed." Most cross-eyed persons are blind or nearly so in one eye. If these cases

When crossing is due to inequality of muscular tension, vision may or may not be involved.

are taken in hand early, and proper glasses adjusted, the defective eye will be brought into use and the vision preserved and ultimate crossing averted.

The only statistical records of eye defects available in Alabama are those collected in Chambers County during the survey. These cover 1,639 cases, tested with the Snellen test type.¹

This test is admittedly faulty, in that it takes no account of accommodation. A slight error of refraction therefrom will not be detected. On the other hand severe cases will be detected.

• CURVE • SHOWING • SUPERIORITY • IN • HEIGHT •
• OF • LANGDALE • CHILDREN • COMPARED • TO • LANETTE • AND • NORMAL •
• SEXES • TOGETHER •

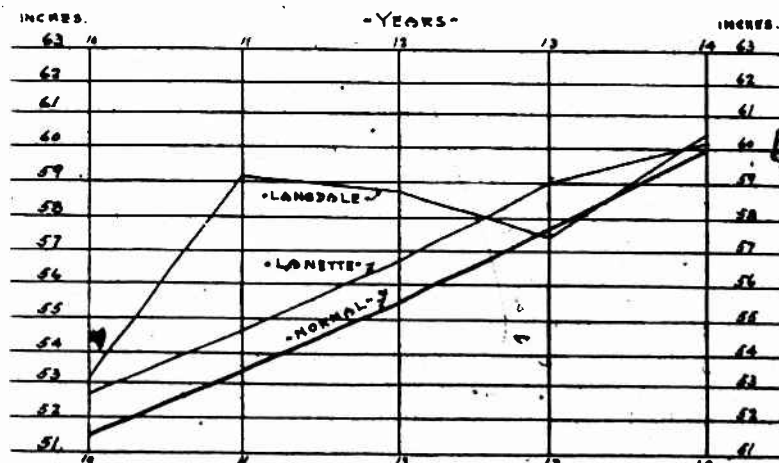


FIG. 26.

Children that tested 20/20 in both eyes were known as Class I, those testing 16/20 in the worst eye were known as Class II. Those testing 12/20 or worse in the worst eye, were known as Class III.

Class I.	Class II.	Class III.	Total
714	609	316	1,639
43.6 per cent	37.1 per cent	19.2 per cent	

From the above it is seen that practically one out of every five children has an error of refraction so great that accommodation will not overcome it, so great that an oculist should be consulted.²

¹ This test is based upon the assumption that the normal eye reacts to light from an object equal in size to a 5-minute arc of a circle. The letters are arranged in various sizes from a 24-minute arc (at 25 feet) up to 50-minute arc. The card is hung on the wall where it is well lighted, and the pupil stood at a measured distance of 20 feet, while the eyes are tested one at a time, the other being covered, but not closed. If the pupil can accurately read the letters of the 5-minute size at 20 feet, his visual acuity is rated 20/20. If on the other hand he can not see the letters of that size, but can see the larger letters, say of 10-minute size, then his visual acuity is rated at 10/20, and so on. This does not differ widely from the Army rejection figures, 21 per cent. Examination of several million children in all civilized countries shows about 30 per cent. needing corrective treatment.

And this is a county where, as will be seen later, the superior vision of the children of the older mills actually reduces the incidence rate. If this is a county where, as will be seen later, the superior vision of the children of the older mills actually reduce the incident rate. If this is a fair index for the State, then there are over 150,000 children of school age with vision needing attention. Here is work for school health supervision.

The above classification, it will be noted, is based upon 1,639 examinations in Chambers County.

Comparison of the eyes of the mill children compared with those of La Fayette shows the following results:

La Fayette.				Shawmut.			Lanett.		
Class	I	II	III	I	II	III	I	II	III
Per cent	43	44	14	23	53	24	46	38	16

In charting Classes I (perfect vision according to test) and II (needing the attention of an oculist), the results are very striking. The examiner was prepared to find the vision of the mill rating lower than La Fayette, but not to find the mill environments actually improving vision.¹

Teeth.—The teeth are another feature of heredity and neglect of great importance. Eight per cent of the Army rejections were on account of teeth. It is now known that many cases of obscure origin, roughly classed as rheumatism and chronic malaria, are tooth intoxications. Dr. Horn, of Union Springs, Ala., in a paper before the State Medical Association of Alabama, says:

Our examinations show that 80 per cent of these (the school) children have decayed teeth. Half of the decayed teeth are the first molars, the six-year permanent teeth, and the keystone to the dental arch, frequently decayed beyond repair, while the parents are considering these important teeth as temporary and unworthy of attention. In 20 per cent we find pus pouring from one or more abscessed teeth.

In Chambers County these general conditions are reflected. Not only the teeth, but the gums are attacked. First there is a deposit of tartar on the teeth at the root, and this spreading follows the tooth into the gums. The gums are eaten away before it, so to speak, and it is a characteristic of gum tissue that once gone it does not replace

¹ The following is a suggested explanation: Errors of refraction are due to deviations from the normal in size and shape of the eye. And these it would seem are hereditary traits, just as the color of the eye is hereditary. Certainly, improvement in health and strength and bodily vigor can not affect the size and shape of the eye. But it is conceivable that such improvement might affect the accommodation. Accommodation is affected by means of muscles. If these are given more tone along with the other muscles of the body, accommodation could be correspondingly improved. Now, if accommodation is improved, when relying upon the Snellen test, the eyes will appear improved. In actual practice it is found that eyes show up better in the morning than the afternoon, the reason being that in the afternoon the muscles of accommodation are tired.

itself. A typical case is a decay on one side, say the six-year molar. On account of the decay, the child ceases to chew on that side. Chewing is nature's process of tooth-cleaning. Hence the teeth on that side become foul, tartar begins to accumulate, the gums are then invaded, they turn red at the margins, and bleed easily, the breath becomes foul, and this is the beginning of that condition known as Riggs disease, or pyorrhea. It is easily prevented, but infinitely difficult to cure or arrest. And once it becomes established each year finds it a little worse, even with the most painstaking care, while if it is neglected, it immediately takes a new start. Ultimately the teeth loosen and come out.

Our knowledge of teeth in Alabama rests upon the studies at Union Springs, Birmingham, and in Chambers County.¹

Dr. Horn quotes statistics showing the proportion of children with defective teeth as follows:

Cities.	Number of persons examined.	Per cent with decayed teeth.
Birmingham.....	3,830	90
Detroit.....	50,000	75
Cleveland.....	4,734	97
Cincinnati.....	28,411	98
Average.....		90

Comparing these statistics with Lafayette, and remembering that the general superiority here is a case of segregation, it is not surprising to find this superiority reflected also in the teeth. One is prepared to find 20 per cent of the Lafayette children with perfect teeth, notwithstanding only 10 per cent with perfect teeth are to be found in the cities quoted by Dr. Horn.

But comparing Lafayette with the mill, one is rather surprised at the effect of the mill environment upon the children's teeth as revealed in figure 27. This will again be referred to under nutrition.

Nutrition.—Probably the most fundamental thing in connection with the general well-being of children, particularly in their growing period, is nutrition. Even among adults it figures largely in both the causation and correction of disease. Beriberi and pellagra are two notable instances where the weight of evidence goes to show the trouble is at bottom one of diet. In both cases the disease is corrected by correcting the diet. In children, rickets is a well-known disease of malnutrition.

There are undoubtedly other cases in which undernourishment plays an important but more obscure rôle. As has been seen, the

¹ In the State survey only the grosser defects seem to have been taken into account. But in Union Springs, Birmingham, and Chambers County, minute examinations were made.

children in the cotton-mill villages of Chambers County have teeth that are superior to the less fortunate children of the towns and cities. And this superiority increases with the age of the mill from the newest to the oldest, where it reaches its maximum. The only reasonable explanation of this phenomenon is that it is a question of nutrition during early childhood, when the teeth are in their formative stages. At this time it is unquestionably important for the child not only to be well nourished, but to be getting in its food all the chemical elements necessary for the building up of chemically perfect teeth, hard, flinty, and able to resist decay. Evidence turns up here and there that strongly suggests that a given child was not properly nourished at that time of life, as chalky teeth, for instance,

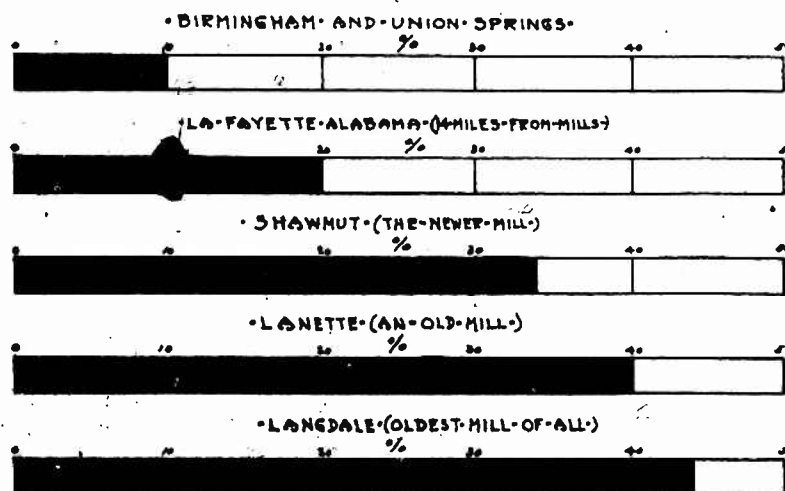


FIG. 27.—Average percentage of children with perfect teeth.

that are too brittle to even carry fillings well. Recently a boy was found with a distinct seamlike line across the outer surface of all his teeth except the eyeteeth, which were later coming. The most probable explanation is that there was some nutritional disturbance when this line was laid down.

A natural question is: How did the mill operate to improve these children? There are three ways in which it might effect physical improvement in its population:

1. It has been noted that the mill population comes from the less prosperous element on the farm; this is the stratum of society in which hookworms are most prevalent. And again, that hookworms do not multiply in the body; that each hookworm has individually been introduced from without. So that if a child suffering from hookworms be removed to a hookworm-free environment he ceases to get

any new worms. Then the old ones gradually die out, and in the course of time he automatically recovers. Perhaps the life of the hookworm does not exceed six or seven years. In that case the children automatically recover in that time. *The mills offer a hookworm-free environment.*

2. Through the pay check the mill operatives get good wages and have little to spend it for beyond simple apparel and "eats." Many of them save money. A banker at West Point told me that they have 3,000 live bank accounts, and this in a total population of 18,000 people. Some of the mill operatives, he said, have as high as \$10,000 on deposit. When the Victory Loan Drive opened, the mills shut down and all got together and went "over the top" in 45 minutes. Some of these people save money and then go back to the farm. These

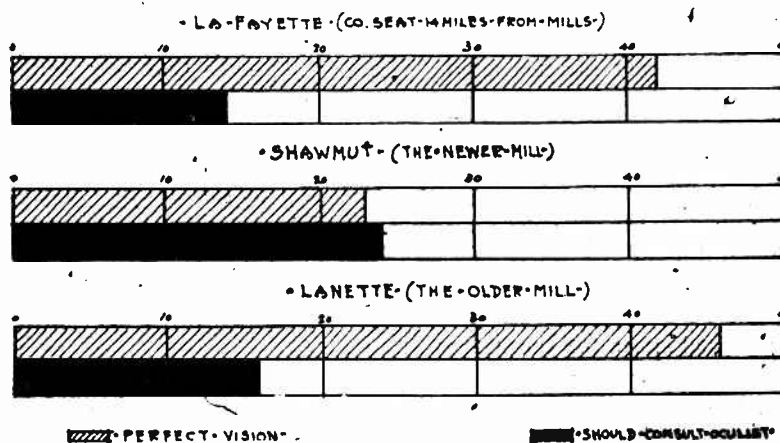


FIG. 28.—Average percentage of children with perfect vision.

are only fragments of evidence of the general prosperity of the mill operatives, but the state of nutrition and the increasing height and weight of the children are unquestionably proofs that they do feed well.

3. The mill brings them together and furnishes congenial associations with their kind, which increases the happiness and contributes to their general well-being. There are probably other ways, but these are unquestionable.

These brief studies justify these suggestions:

1. That the physical inferiority of the mill population was acquired before coming to the mills.
2. That it is a case of segregation, the effects of which are reflected not only in the physical inferiority of the mill group but also in the physical superiority of the population left behind.

3. That this physical inferiority, reflected in the premill age where the studies have been made, is, a priori, to be expected.

4. That the mill environments react upon the premill population in a favorable way, as is shown by improvement in height, weight, condition of teeth, and vision.

Further investigation along lines herein suggested will yield results of the first magnitude.

A working plan.—The general plan of school health supervision that has given best results originated in Florida. It is in successful operation in Palm Beach County and other counties in that State. The county board of education employs a health supervisor upon a 12-month basis, furnishes a Ford, with its upkeep, and turns her loose. (Experience has shown that for the successful prosecution of the work a car is absolutely necessary; so much so that in counties where the condition of the roads do not permit the use of a car the work is not recommended.) This presupposes that the health supervisor shall have certain qualifications and training to be discussed later.

The first step in working out the plan was to change from the medical inspection viewpoint, and from the public health nursing viewpoint to the teaching viewpoint. To this end a *teacher* was employed instead of a *nurse* as school health supervisor. This was the original plan in Florida, and the plan followed in this survey in Chambers County, the results of which are partly incorporated in this report and speak for themselves.

The direction.—It was not seen from the beginning the direction that this idea when put into practice would take, the lines along which it would evolve. Turning the idea loose and following its lead, it soon established the line of cleavage between the functions of the board of education and the board of health.

For instance, it is noted that *physical traits run in families*. In one family the children will have especially beautiful dental arches; in another the arches will be uniformly high. In one family there will be found especially good eyes; in another there will be a large number of cases of eye trouble of one kind or another. In one family the children will be straight; in another, drooping, etc. Gradually the idea let loose and its lead followed separated the health conservation problems into two groups: Those diseases for which our neighbors are primarily responsible, and which we call communicable; and those for which we and our parents are primarily responsible, and which we call the diseases of heredity and neglect.

But the idea did not stop here. It was constantly and insistently noted that, among family traits, special mental characteristics are as common as physical. Mental, like physical, deficiencies, may be even classified as those of heredity and neglect; e. g., feeble-mindedness.

is an instance of hereditary mental deficiency; illiteracy in the otherwise sound mind is an instance of mental deficiency due to neglect. Thus it is noted that both groups, physical and mental, have their roots in heredity and neglect. The idea has step by step drawn together the deficiencies of heredity and neglect, both physical and mental.

Pari passu the idea indicated the special training that the health supervisor should have indicated that she should know how to use "eyes, scales, and a tapeline," and make an intelligence test, and should know something of the fundamentals of heredity.

The results achieved in Chambers County, where the method was introduced for the purpose of this study, will indicate something of its practical working value. Only it should be borne in mind that these results were achieved in five weeks, and that only a portion of the actual achievements have been incorporated in the report; that the great end results are that near 2,000 children in the county have had a due inventory of their deficiencies taken, in which they themselves have helped do the work; and that now they are busily engaged in having the remediable deficiencies corrected.

The procedure has been received by the people of the county with the utmost appreciation. In our last interview, Supt. Barnett stated that it was his program to continue the work, even if he has to reduce the length of school term, say, three days to meet the financial obligations it incurs.

The plan of procedure here proposed has several features to commend it, the following of which may be mentioned:

1. Simplicity. It involves no new legislation. The county boards of education have as ample authority to engage a health teacher as a teacher of mathematics.
2. It harmonizes with the general school organization. Its introduction is without friction, without a jar of any kind.
3. It harmonizes with the board of health.² The line of cleavage shows where the duties and responsibilities of the two government units meet. It disposes of duplication of work, and leaves each to develop along its own lines, each unhampered by the other—the one developing the *teacher* idea, the other the *policing* idea.
4. It provides at once a workable method for taking advantage of the recent Army developments in intelligence testing, the importance of which can not be overestimated.
5. In providing a State-wide standardized program it will enable the findings in one part of the State to be compared with findings elsewhere, and will thus lay the foundation for the final solution of some of our social problems. The findings in the cotton mills during this brief period hint at what lies beyond.

Résumé of recommendations.—1. That the line of cleavage herein proposed be established as defining the recognized functions of the boards of education and health, respectively.

2. That each county board of education employ a school health supervisor upon a 12 months' basis, and furnish her a car with its upkeep.

3. That the State department of education engage the services of a State school health supervisor to organize, supervise, and direct the work in the several counties. He should have a broad medical knowledge, with a sociological turn of mind and a pioneering spirit of investigation in order to get best results.

DO THE RURAL AND VILLAGE SCHOOLS
OF ALABAMA NEED HEALTH DIRECTORS?



FIG. 20.

II. POSITIVE PHYSICAL EDUCATION.

The preceding pages have dealt with the problems of preventing and remedying disease and defect. Quite as significant is the positive work of physical education, the aim of which may be defined as:

More fully and thoroughly to prepare the boys and girls of the Nation for the duties and responsibilities of citizenship through the development of bodily vigor and endurance, muscular strength and skill, bodily and mental poise, and such desirable moral and social qualities as courage, self-control, self-subordination and obedience to authority, cooperation under leadership, and disciplined initiative.

The essentials are: Systematic course of physical training activities adapted to the age and strength of the children; skilled and competent direction by teachers and supervisors; adequate material facilities in the way of playgrounds, athletic fields, and equipment. Indoor gymnasiums are necessary only where and when climatic conditions make out-door exercise impracticable, or in cities where out-door space can not be had.

It must be understood that "physical-training activities" include calisthenics, gymnastics, marching exercises, and organized play games and athletics. No greater mistake can be made than to iden-

tify these things with "recreation," in the sense of diversion and amusement. They are the solid substance of physical education as defined below.

It was unnecessary to make extensive investigation of physical education in this survey. The ground was sufficiently covered in the survey of Child Welfare in Alabama¹ conducted by the National Child Labor Committee in 1918.

In the section on playgrounds and play equipment in the chapter on education (pp. 81, 82), it is stated that the grounds and equipment for organized games and athletics both in urban and rural schools are wholly inadequate, and that supervisors are rarely employed. The sole exceptions are the schools supported in whole or in part by the large corporations.

The matter is more extensively treated in the chapter on recreation, but with no modification of the conclusion stated above.

Recommendations.—There should be enacted a modern physical education law for the State. During the past four years 13 States have enacted laws providing for State-wide physical education. The following summary of the legislative provisions necessary for an effective system of physical education is based upon this recent legislation:

1. A clear statement of the purpose and subject of the law.² (See N. Y., N. J., Calif., R. I.)
2. Provision of administrative machinery in the State department of education sufficient for the effective administration of the law. This provision should be broad and flexible. Two things are essential:
 - (a) State direction and supervision. The best plan is a State director of physical education with the rank of deputy or assistant State superintendent. His powers and duties must not be narrowly defined. (N. Y., Calif., Md.)
 - (b) Sufficient financial resources to insure the effective administration of this office, either by specific appropriation or by authorizing the State department to make adequate appropriation for this purpose out of the general school funds.
3. Provision for the continuous physical education of all children and youth of school age (6-18) in the State:
 - (a) All children in all grades and departments of the public schools.
 - (b) All children in institutional and private schools. (N. Y., R. I.)
 - (c) All students in normal schools and other schools in which teachers are trained. (N. J., Calif.)

¹ Child Welfare in Alabama. An inquiry by the National Child Labor Committee, under the Auspices and with the Cooperation of the University of Alabama. Edward N. Clopper. Published by National Child Labor Committee, New York, 1918.

² See Bu. of Edu. Bul., 1918, No. 40. Recent State Education for Physical Education.

(d) All boys and girls of school age in industry. This may be secured by extending the continuation school program so as to make physical education obligatory up to 18; or it may be secured by recognizing and crediting such agencies as municipal playgrounds, Boy Scouts, Young Men's Christian Association. Attempts at precise definition in the law should be avoided. It should be left as an administrative problem under general authorization. (N. Y.)

4. A minimum time requirement for physical education of one hour each day. It should be explicit that this is the minimum and that school authorities are encouraged to increase the time devoted to play, recreation, and athletics outside the regular school hours. For children in the higher grades and in industry, activities that are approved by the State director of physical education as equivalent to prescribed courses in physical education should be accepted as fulfilling, in whole or in part, the time and quality requirements in physical education.

5. There should be a carefully drawn provision authorizing and requiring the employment of supervisors and special teachers under specified conditions and in harmony with the administrative organization of the State. A State with a county unit organization would require county supervisors; one with supervisory districts would require district supervision. City systems would require both supervisors and special teachers—the latter for intermediate and high schools at least. By specified conditions is meant that a supervisor should be required for a given unit of school population, the size of the unit to depend upon density of population.

6. Provision for State aid to county and local authorities in part payment of the salaries of supervisors and special teachers. (N. Y., Nev.)

7. Provision requiring the State department of education to fix qualifications of supervisors and special teachers and to issue special licenses for the same.

8. Provision for adequate physical education in the preparation of all teachers, both for the secondary and the elementary school. The essential requirements of this part of the teachers' education should be prescribed by the State authorities.

9. Special provision for training regular class teachers already in the service in order that they may do their essential part in the program of physical education. (N. Y., N. J.)

10. Provision requiring that pupils be graded in physical education as in other school subjects and exercises and that satisfactory progress in physical education be a condition to promotion and graduation. (N. J., Calif.)

11. Effective provision for coordinating medical and sanitary supervision of schools with the physical education. Otherwise such essential factors in a complete program of physical education as detection and correction of defects and sanitary conditions of grounds, buildings, and equipment will be neglected. Most States having medical inspection laws will need to revise and extend them. In States having no such laws the enactment of medical inspection and physical education laws should be worked out so as to insure effective coordination.

12. If, as in some of the laws already enacted, reference is made to military training, the interrelations should be clearly recognized. A system of physical education worthy the name must include all the essentials of premilitary training; development of sound physical condition, training in care of one's physical self, training in cooperation, respect for discipline. Drill in tactics and the manual of arms can not be accepted as a substitute or equivalent for the course in physical education. If military training is authorized in the law, then the State director of physical education should be authorized and required to pass upon the value of any proposed plan of military training and to accept it as substitute for physical education only in so far as it includes the health, vigor, and endurance-producing features of the physical education program.

The items in this program of most immediate importance in Alabama are those relating to State direction and supervision—Section 2 (a) and (b). A competent State supervisor will work out the details of legislation needed in the State. The salary must be sufficient to command a broadly educated and experienced man; \$3,500 a year should be the minimum.

Chapter XVII.

HOME AND SCHOOL GARDENING.

Productive educative employment for town children.—About one-fourth of the children of Alabama live in the 46 cities listed as having a population of 2,000 or more, and a considerable per cent in the remaining 231 incorporated communities and mining and mill villages in which many of the features of urban life are found. For these children especially it is desirable to know of their out-of-school occupations.

Present occupation of the child.—To determine what occupations of the city and town school children have taken the place of those of the rural districts, teachers of the four upper grades of grammar schools were asked to make a tabulated list of the occupations, earnings, and home employment of the children, both during out-of-school hours and in vacation. These lists were compiled very carefully and fully by the teachers. For purposes of comparison, the cities which reported are divided into groups as follows:

1. Cities of over 25,000 population—3.
2. Cities of 10,000-25,000 population—4.
3. Cities of 5,000-10,000 population—5.
4. Cities of 2,000-5,000 population—24.
5. Cities under 2,000 population—62.

Summaries of the reports of children for each class of cities are discussed in the following sections. For the convenience of the reader the figures have been reduced to percentages.

The school year.—In the cities and towns of Alabama the white schools are in session (school year 1917-18) 178 days, and the colored schools 171 days. This leaves, excluding Sundays, a total of 135 days when the white children are not in school and 142 vacation days for the colored children.

The school day.—The city schools are in session on an average of about five hours per day. On school days at least three additional hours might be used for educative occupations, and five hours of vacation days, and yet enough time be left for home work, home study, and play. Occupations interesting and educative are in themselves recreational.

Vocational and avocational occupations.—The school system of Alabama had its inception at a time when nearly all of the people

were engaged in agricultural pursuits. The Saturday holidays and the longer summer vacations were planned that the children might help with the planting, cultivation, and harvesting of the farm crops. When the child who lives on the farm is not in school there are always purposeful duties that form habits of industry, and from which knowledge may be constantly gained. With the rise of the cities the same general school plan was continued, except that the city schools are in session a slightly larger number of days each year.

Summary of employment of school children, away from home.—The teachers of the cities and towns of Alabama reported on the occupations of 27,555 school children in the four upper grades of the grammar school. Of the total reported, 23,579, or 85.5 per cent, do not have any gainful occupation away from home during out-of-school hours; and 22,349, or 81.1 per cent, are not engaged in such occupations during the summer vacation. The number of employed in the larger cities is much greater, but the per cent of employment does not vary markedly in the different sized cities, as shown by the following percentages:

Per cent of school children with employment.

Cities.	In out-of-school hours.	In vacation.
In cities of over 25,000.....	13.3	19.4
In cities from 10,000 to 25,000.....	17.8	22.3
In cities from 5,000 to 10,000.....	24.6	31.3
In cities from 2,000 to 5,000.....	25.1	14.8
In cities with under 2,000.....	32.0	30.3

The average amount of money earned per week is independent of the size of the city. The average earnings of colored children are about the same as those of the white children. For the total number of children employed an average of \$2.74¹ per week is earned during the out-of-school hours and an average of \$4.33¹ in vacation.

Occupation of white girls away from home (Table 48).—A very small number of white girls are employed in gainful occupation outside the home. Of the 11,447 reporting, only 299 are so employed in the out-of-school hours and 418 during vacation. The size of the city seems to make little difference in the per cent employed. The average earnings per week of the girls employed away from home ranges from \$1.80 to \$2.65 during out-of-school hours, and from \$3.52 to \$5.69 in vacation. The average amounts received per week are slightly less in the smaller cities than in the larger cities.

White girls at home (Table 49).—The comparatively small number of white girls employed in regular home duties is, without doubt,

¹ Average of averages.

due to the employment of negro servants in the home. Of the 11,447 white girls reported, 3,877 have home duties. The per cent employed in home work decreases with the increase in the size of the city. The range of percentage employed is from 16.9 per cent in cities of over 25,000 to 76.1 per cent in towns of less than 2,000 population; the per cent of girls paid for home work decreases as the cities decrease in size.

TABLE 48.—Occupation of white girls in gainful employment outside the home.

Population of cities.	Total number reporting.	Number employed.	Per cent employed.	Average earnings per week of those employed.	Number employed.	Per cent employed.	Average earning per week of those employed.
Over 25,000.....	5,941	183	2.6	\$2.62	195	3.3	\$4.76
From 10,000 to 25,000.....	1,298	19	1.5	2.65	56	4.3	5.32
From 5,000 to 10,000.....	1,067	55	5.1	2.40	57	5.4	5.00
From 2,000 to 5,000.....	2,068	36	1.7	1.80	55	2.6	2.62
Less than 2,000.....	1,043	86	8.2	1.80	55	5.3	2.62
Total.....	11,447	299		2.25	418		4.66

TABLE 49.—Occupation of white girls at home.

Population of cities.	Total number reporting.	Number having regular home work.	Percentage.	Average number of hours.	Number who receive home pay.	Percentage paid.
Over 25,000.....	5,941	1,004	16.9	7.4	784	78.0
From 10,000 to 25,000.....	1,298	262	27.9	7.3	248	66.8
From 5,000 to 10,000.....	1,067	326	49.8	7.0	253	47.9
From 2,000 to 5,000.....	2,068	1,191	58.7	8.6	541	45.4
Less than 2,000.....	1,043	794	76.1	7.2	325	28.3
Total.....	11,447	3,877			2,660	

Colored girls away from home (Table 50).—Of the 3,463 colored girls reported, 487 were employed during the out-of-school hours and 679 in vacation. The per cent of colored girls engaged in employment outside the home increases with the decrease in the size of the city. The percentage for cities of under 2,000 population is much greater than for any other class of cities, although the number of girls reported is too small for the basing of definite conclusion. The amount of money earned ranges from \$1.40 to \$3.09 per week during out-of-school hours, and \$2.88 to \$4.06 in vacation. The amount of money earned is usually slightly less in the small cities.

Colored girls at home (Table 51).—A very small per cent of the colored girls claim to have regular home duties. The average percentage does not vary greatly in cities of over 2,000 population, but decreases one-half or more in towns of under 2,000 population. The number of hours per week that colored girls are engaged in home

duties is about double the number of hours that white girls work at home. In the large cities a much larger per cent of colored girls are paid for home work than in the towns. This per cent decreases with the decrease in population except in the case of cities of from 10,000 to 25,000 population, when it is slightly larger than in cities of over 25,000 population.

TABLE 50.—Occupation of colored girls in gainful occupation outside the home.

Population of cities.	After school.				In vacation.		
	Total number reporting.	Number employed.	Per cent employed.	Average earnings per week of those employed.	Number employed.	Per cent employed.	Average earnings per week of those employed.
Over 25,000.....	1,958	143	7.3	2.22	285	14.5	3.48
From 10,000 to 25,000.....	457	82	13.5	3.09	108	23.6	2.91
From 5,000 to 10,000.....	190	54	28.4	1.71	55	28.9	2.28
From 2,000 to 5,000.....	729	158	21.6	1.47	180	21.9	4.06
Less than 2,000.....	129	70	54.2	1.30	71	55.0	2.33
Total.....	3,463	487		1.95	679		3.03

TABLE 51.—Occupation of colored girls at home.

Population of cities.	Total number reporting.	Number having regular home work.	Percentage.	Average number of hours.	Number who receive home pay.	Percentage paid.
Over 25,000.....	1,958	1,567	80.0	7.0	526	33.6
From 10,000 to 25,000.....	457	406	88.8	11.2	152	37.4
From 5,000 to 10,000.....	190	183	96.3	19.8	42	22.9
From 2,000 to 5,000.....	729	651	89.3	13.1	32	12.5
Less than 2,000.....	129	44	34.1	12.5	0	.0
Total.....	3,463	2,851			824	

*Occupation of white boys away from home (Table 52).—*Reports were received on the gainful occupations of 10,402 white boys, of which number 2,427 were employed away from home, after school and on Saturday, and 3,142 during vacation. The percentage of employed does not vary greatly with the size of the city, although the per cent employed is slightly smaller in the smaller cities. Twenty-three out of each 100 is the number employed during out-of-school hours, and 28 in vacation. The character of the work of boys varies with the size of the city. In the larger cities there is a larger percentage of occupations that take the boys long distances from home, such as selling newspapers on the street, messengers, and helpers in stores. In the smaller towns these employments are engaged in by a few children, while the care of horses and cows, the mowing of lawns, and running of errands for neighbors increase.

The average amount of money earned per week by each boy varies from \$2.70 to \$3.69 in the out-of-school hours, and \$3.52 to \$5.85 in vacation. The amount earned per week is slightly less in cities of less than 5,000 population.

White boys at home (Table 53).—The reports on the employment of boys at home are much more significant. There is a constant decrease in the per cent employed with the increase in the size of the city. In cities of over 25,000 population, 23.7 per cent of the boys have home duties, while 76.1 per cent have regular home work in cities of under 2,000. The number of hours of employment per week, however, varies only slightly. The per cent of children paid by parents for home work decreases with the decrease in the size of the cities.

TABLE 52.—Occupation of white boys in gainful employment outside the home.

Population of cities.	Total number reporting.	After school.			In vacation.		
		Number employed.	Per cent employed.	Average earnings per week of those employed.	Number employed.	Per cent employed.	Average earning per week of those employed.
Over 25,000.....	5,320	1,276	23.9	\$3.69	1,742	32.8	\$5.04
From 10,000 to 25,000.....	1,191	320	26.8	3.62	384	32.2	5.37
From 5,000 to 10,000.....	977	271	27.7	3.11	311	31.8	5.48
From 2,000 to 5,000.....	1,887	378	20.0	2.98	487	25.8	3.52
Less than 2,000.....	1,027	182	17.7	2.70	218	21.2	4.19
Total.....	10,402	2,427	.....	3.21	3,142	.....	4.80

TABLE 53.—Occupation of white boys at home.

Population of cities.	Total number reporting.	Number having regular home work.	Percentage.	Average number of hours.	Number who receive home pay.	Percentage paid.
Over 25,000.....	5,320	1,265	23.7	7.5	847	67.0
From 10,000 to 25,000.....	1,191	328	27.5	9.0	194	59.0
From 5,000 to 10,000.....	977	491	50.2	7.0	228	46.6
From 2,000 to 5,000.....	1,887	1,074	56.9	8.0	478	44.5
Less than 2,000.....	1,027	783	76.1	8.0	301	38.7
Total.....	10,402	3,940	.....	.....	1,938	.....

Colored boys away from home (Table 54).—Of the 2,248 colored boys reported, 763 are employed during out-of-school hours and 967 in vacation. The average per cent employed increases with the decrease in the size of the cities, although the average per cent does not vary greatly in the cities with between 5,000 and 25,000 population. The average amount of money earned per week ranges from \$2.61 to \$4.68 during the out-of-school hours and from \$4.28 to \$6.52 in vacation.

Colored boys at home (Table 55).—The record of employment of 2,243 colored school boys was reported, of which number 671 were employed in regular duties at home. The percentage of such employment increases, with the decrease in the size of the cities, as was also the case with white boys. The number of boys paid for work at home decreases with the decrease in the size of cities.

TABLE 54.—Occupation of colored boys at home.

Population of cities.	Total number reporting.	Number having regular home work.	Percentage.	Average number of hours.	Number who receive pay for home work.	Percentage paid.
Over 25,000.....	1,279	250	19.6	12.3	68	27.3
From 10,000 to 25,000.....	267	79	29.6	8.4	23	29.1
From 5,000 to 10,000.....	102	47	46.0	14.3	9	19.1
From 2,000 to 5,000.....	529	260	49.1	11.9	24	9.3
Less than 2,000.....	66	35	53.0	16	0	0
Total.....	2,343	671			124	

TABLE 55.—Occupation of colored boys in gainful employment outside the home.

Population of cities.	Total number reporting.	After school.			In vacation.		
		Number employed.	Per cent employed.	Average earnings per week of those employed.	Number employed.	Per cent employed.	Average earnings per week of those employed.
Over 25,000.....	1,279	420	32.8	3.25	502	42.9	4.48
From 10,000 to 25,000.....	267	123	46.0	4.68	150	56.1	5.05
From 5,000 to 10,000.....	102	47	46.0	2.61	49	47.0	4.28
From 2,000 to 5,000.....	529	286	54.0	2.83	288	54.4	4.51
Less than 2,000.....	66	37	56.0	4.30	30	45.0	5.23
Total.....	2,243	763		3.53	967		4.93

Employment at home.—Of the 27,555 children reported, 16,216, or 58.8 per cent, do not have occupations at home. The amount of home employment increases with the decrease in the size of the city in all cases except that of colored girls. The following comparison of classes of cities shows the comparison of percentages for all children:

	Percentage employed.
In cities of over 25,000.....	35.0
In cities of from 10,000 to 25,000.....	43.4
In cities of from 5,000 to 10,000.....	60.4
In cities of from 2,000 to 5,000.....	63.0
In cities under 2,000.....	59.8

Personal investigation shows that much of the home work of children is indefinite and irregular. White children are employed on an average of about one hour per day and the colored girls and boys for two hours. In the larger cities the parents often stated that they

desired to have their children employed for a part of the time, but that they were unable to find purposeful occupations suited to the age of the child. The amount of home work not only increases in the smaller towns, but also the duties become more regular—duties that must be done at a certain time and in a definite way. Although the amount of work and definiteness of the duties increase in the smaller towns; the percentage of children encouraged by being paid or given a project of their own, from which money may be made, decreases in the smaller towns, especially in those under 2,000 population.

	Percentage receiving pay.
In cities of over 25,000.....	51.4
In cities of from 10,000 to 25,000.....	47.7
In cities of from 5,000 to 10,000.....	34.1
In cities of from 2,000 to 5,000.....	27.9
In cities under 2,000.....	13.5

Manual training and domestic science.—Manual training and domestic science have been introduced into some of the city schools. When introduced, however, these subjects have taken the time formerly given to the teaching of academic subjects and the school day has not been lengthened. The shops, kitchens, and sewing rooms are not open during out-of-school hours nor in vacation, and with the exception of a few mining camps and mill villages, no attempt has been made to interest children in shop or domestic science work at the home. So far as could be learned, the introduction of these subjects has done little to furnish any gainful occupation for out-of-school hours by which the child can become an economic factor in the home.

Teaching of agriculture.—The Alabama State law requires the teaching of agriculture in all of the schools.

"Legal Provision for Instruction in Agriculture in the Alabama Public Schools."

1747. *Teaching agriculture in public schools.*—In addition to the branches now taught in the public schools, instruction shall be given in the elementary principles of agriculture, and said subject shall be taught as regularly as other branches are taught in such schools, by the use of a textbook in the hands of the pupils, and such instruction shall be given in all public schools of the State.

Under the law, however, instruction in agriculture has not made the progress in the practical direction hoped for by the legislators. Textbooks on agriculture have been adopted by the State and class lessons in agriculture are given as a part of the regular program in many schools. The school superintendents are unanimous in the opinion that the textbook work can only reach its greatest value when it is supplemented by practical school and home occupation, which should constitute the major part of the work. To combine classroom

teaching with practical home and school agricultural projects would vitalize all of the work of the schools. In many of the cities and towns the teaching of agriculture has been largely abandoned because no plan has been worked out to make it practical. As taught at present, agriculture does not furnish city children any definite occupation during the school hour, after school, Saturday, or during the summer vacation.

The Walker County vocational educational bill.—By special act of the legislature in 1915, boards of education of cities and towns in Walker County may establish and maintain vocational and industrial departments in the elementary and high schools. The law states that the city boards of education may furnish equipment and employ special teachers for this work. Principals and teachers are then held responsible for the carrying out of practical vocational employments in a definite way. Each child electing to take up studies in the vocational department is required to perform and report on a definite project. Pupils who select agricultural employment are required to produce for home consumption or for market products which will, in value, represent at current prices, according to their respective ages, as follows:

	Value of products.
Boys 10 to 12 years of age.....	\$10.00
Boys 12 to 14 years of age.....	20.00
Boys 14 to 16 years of age.....	30.00
Boys over 16 years of age.....	40.00
Girls 10 to 12 years of age.....	5.00
Girls 12 to 14 years of age.....	10.00
Girls 14 to 16 years of age.....	20.00
Girls over 16 years of age.....	25.00

Several schools in Walker County are now being operated in accord with this act, and some very satisfactory results have been obtained. A longer period of experimentation, however, will be required before the merits of the plan are completely demonstrated. The law has many points that commend it as a State-wide plan.

Playgrounds.—At present no adequate provisions are made by the schools or other agencies in the cities of Alabama for educative occupation for out-of-school hours of children. As suggested, such activities, rightly directed, may become recreation, and yet every child should have a certain amount of time for play. The playground space and play equipment in the cities and towns is very meager, as shown by the following report taken from "Child Welfare in Alabama":

The grounds devoted to play in the cities and incorporated towns are, with few exceptions, wholly inadequate. This is especially true in most of the schools of the larger cities. It is only recently that the attention of school authorities has been directed to this important matter.

A number of schools in the cities of the first class are located convenient to city playgrounds and parks, but such substitutes for school grounds have not proven altogether satisfactory.

One acre of ground is a liberal estimate of the average area of playgrounds in the city and town schools of the State.

Play equipment in urban schools is, as a general rule, as meager as the playground is restricted. Most of these schools are provided with basketball courts and baseball diamonds and equipment for playing these games. There are, however, very few instances on record where the equipment was purchased with any funds secured either directly or indirectly from the school. The purchase money was obtained by subscription from the citizens of the town interested in the school children, and through assessments made by the children on themselves.

A few schools in Birmingham and Mobile have been supplied with the minimum outdoor-play equipment for use of the smaller children. This is true, on a small scale, in a few of the cities of the second class, as Gadsden, etc.

Boys' and girls' agricultural clubs.—Boys' and girls' agricultural clubs of Alabama are conducted as a division of the department of extension of the Agricultural College, Alabama Polytechnic Institute, Auburn, Ala. The boys' and girls' club and demonstration work with women is under the direction of a superintendent of junior and home economics extension. The boys' club work is supervised by five assistant State-club agents, and the work in each county is under the direction of the county agricultural agent, who is also responsible for farm demonstrations. These agents are so busy with the demonstration work with farmers that juvenile clubs are often neglected unless the county superintendent of schools and his teachers give active support. In the agricultural club work for girls the superintendent is assisted by a State home demonstration agent and four assistant State home demonstration agents. Women demonstration agents are employed in most of the counties and are held responsible for the carrying out of the work planned for women and girls by the State agents. The State superintendent of junior and home economics extension states that about 70 per cent of the time of these county demonstration agents is given to the organization of girls' clubs. In 35 of the counties the county board of education pay a part of the salary of the demonstration agents. When thus employed the agents must hold a teacher's certificate. Even when employed by the county school department, demonstration agents do not work under the direction of the county superintendent and are not considered an organic part of the education system. In most cases, however, there is a mutual spirit of cooperation.

On May 8, 1918, 21,358 children were enrolled in the boys' and girls' agricultural clubs. Several thousand additional enrollments had been listed on March 1, 1919. The city superintendents of schools report that 846 school girls are enrolled in agricultural clubs, 228 of these are in cities and towns of under 2,000 population. In

the public schools 377 boys are enrolled in agricultural clubs, 228 of whom are in cities and towns of under 2,000 population.

Considering only the number of children of the four upper grades of the grammar school who are reported in this survey, about 3.4 per cent of these children are enrolled in agricultural clubs and in cities of over 2,000 population; enrollment in such clubs is 1.2 per cent. This small percentage is to be expected, as the Federal "Smith-Lever" funds are restricted by law to use in the rural districts, although during the war a part of the "Emergency fund" was applied to the organization of clubs in urban communities.

Agricultural and home-makers clubs among the Negroes.—The Negro farm demonstration agents and home demonstration agents work from Tuskegee in the central and southern part of the State and from the Agricultural and Mechanical College in the northern part of the State in organizing boys' and girls' clubs in rural districts. In addition, home-makers clubs for Negro girls and their mothers have been organized under the direction of the county superintendents of education. This work is made possible by money given by the General Education Board and expended through public school officials. In the summer of 1917 the following clubs were organized:

Number of clubs organized.....	532
Number of girls enrolled.....	6,774
Number of mothers enrolled.....	6,915
Total membership.....	13,639
Number of public demonstrations in canning.....	937
Number of homes visited.....	5,290
Number of quarts of fruits and vegetables saved for home use.....	461,737

Through the Jeanes fund the counties are enabled to employ special industrial supervising teachers during the school year. In the school year 1917-18 thirty such teachers were employed in 26 counties. These teachers visit rural schools, teach elementary industrial subjects, help the teachers with their work, and hold meetings of school patrons to stimulate interest in better schools. These supervising teachers organize and supervise boys' and girls' clubs.

All of the work under the General Education Board and Jeanes funds is supervised by one of the rural school agents of the State department of education and a colored assistant, who are paid jointly by these funds. As is the case with the white children, practically all of the industrial work with the colored children, through the national, State, and private funds, is devoted to rural communities.

United States school garden army.—Since October, 1918, the United States Bureau of Education in cooperation with the State Department of Education of Alabama has furnished a part-time worker to assist in organizing school-directed home gardening in the cities and towns of the State. Since March, 1 this worker has given

full time to the State of Alabama. Up to May 1, 1919, 20,200 children have enrolled in this out-of-school-hour garden employment, and now it seems that the work for the present season will be highly successful.

So far as could be learned, this is the only State-wide work organized to promote industrial occupation for city and town children. The salary of this worker is paid wholly by the United States Bureau of Education from the National Security and Defense fund. As this fund is available only until July 1, 1919, it is probable that the work will have to be discontinued unless funds are furnished by Congress or the State Legislature of Alabama.

In the cities where this work is being conducted the salaries of the garden teachers are paid by the local boards of education or by local philanthropic agencies that turn the organization and direction of the gardening over to the school authorities.

Relation of idleness to juvenile offenses.—The juvenile court is largely a city institution. While there are cases of dependency and delinquency in country districts, these cases are so few that rural counties seldom establish such courts, the work being handled by the probate judge. Of the 67 counties in the State, only 12 have taken advantage of the State law and appointed an advisory board to assist the probate or juvenile court judge and in only 5 counties have probation officers been appointed. The 5 counties in which probation officers have been appointed contain the 5 largest cities in the State, and 7 of the 12 advisory boards have been appointed in the 7 counties containing cities of over 10,000 population.

It is true that there are dependent and delinquent children in rural districts that sadly need the care of some protective agency. It is a fact, however, that the majority of these cases are found in the city. The juvenile court judge of Jefferson County stated that, of all the cases before his court, not over 2 per cent came from the strictly rural districts.

The fact that children on the farm have definite occupations under the direction of the parents, when not in school, and are thus economic factors to the home, undoubtedly has a direct bearing on the number of cases of delinquency and perhaps of dependency. The lack of productive educative occupation often leads to offenses on the part of the child. The child without regular duties is often "the father of the man without a job." The inability of adults to earn a good living leads to social unrest, plastic material for the molding of I. W. W. and Bolshevistic agitators.

The juvenile court records of Montgomery County were studied for the calendar year 1918 and for Jefferson County for 24 months beginning with April, 1917, and ending with March, 1919. The following records for Montgomery County are taken from the annual

report of the chief probation officer, and for Jefferson County they were copies from the well-kept records of the juvenile court judge.

Juvenile court records, Montgomery County, January 1 to December 31, 1918:

Delinquent white boys.....	187
Delinquent Negro boys.....	277
Delinquent white girls.....	31
Delinquent Negro girls.....	50
Total.....	525
Delinquent cases continued on probation for the year 1917.....	59
Total.....	584
Charges against delinquents:	
Petty larceny.....	185
Grand larceny.....	34
Disorderly conduct.....	234
Immorality.....	39
Truancy.....	59
Vagrancy.....	15
All other charges.....	28
Total.....	584
During the year the number of cases of dependent children handled was.....	159
Continued from previous year.....	37
Total.....	196

Jefferson County court record from April 1, 1917, to March 31, 1919:

Number of dependent cases.....	672
Number of delinquent cases.....	1,750
Total.....	2,422
Nationality of delinquents and dependents:	
American—	
Male.....	905
Female.....	485
Negro—	
Male.....	831
Female.....	124
Foreign—	
Male.....	64
Female.....	13
Total.....	2,422
Age of delinquents and dependents:	
Infants of two years.....	163
Three to six years.....	192
Seven to thirteen years.....	1,268
Fourteen to eighteen years.....	804
Total.....	2,422

Employment of children:

Between ages of 7 and 13.....	195
Between ages of 14 and 18.....	335
Not employed (birth to seventh year, 355; from 7 to 18, 1,537).....	1,892
Total.....	2,422

School attendance:

Regular.....	713
Irregular.....	643
Do not attend.....	579
Total.....	1,935

From these tables several conclusions may be drawn. The number of boys before both courts is much larger than the number of girls. In the Montgomery County court, of the charges against delinquents, 71.8 per cent are for petty larceny (31.8 per cent) and disorderly conduct (40 per cent). The ages of children were not given in the Montgomery court record, but in Jefferson County 52.1 per cent of the offenders were between the ages of 7 and 13. Many of the records of these offenses were examined and in most cases they were minor offenses that grew out of the play instinct that in the city found no other means of expression. Of the 1,537 cases of children between 7 and 18 years of age, 1,007 did not have any regular employment. From the children's own statements in regard to school attendance, 1,222 either did not attend at all or were irregular in school attendance. With 1,007 children who do not have any employment and 1,222 who are in school a very small part of the time or not at all, is it any wonder that these children commit enough disturbance in the community to bring them to the juvenile court? What group of normal children would not?

School-directed home gardening.—All of the permanent State agencies engaged in promoting industrial education (agricultural and home makers clubs) for children are working in the rural districts. The lack of occupation and meager play facilities on the part of a larger per cent of town children makes it imperative that the State should furnish money for educational occupations adapted to the cities and towns. It is the duty of the State to furnish to all its children equal advantages. Under city conditions the problem is to furnish practical employments of educational value. One such occupation that has proven its worth in several Alabama cities and many cities in other parts of the country is school-directed home gardening.

Available land.—Practically all of the cities of Alabama have been planned on a generous scale and the congested tenement areas found in many northern cities are not present. In few of the cities are the lots as small as 25 by 100 feet. In the suburban section and in the

smaller cities and towns, average house lots range from 50 by 150 feet to an acre or more. In all the cities, the school principals and teachers state that enough land is available in back yards and vacant lots so that garden spots can be found for all of the children. In a few of the colored sections the house lots are small, but in many cases the Negro settlements are near the edge of town where there are large tracts of vacant land. Of the total number of white children (21,849 reported) 2,282 live in apartments, tenements, and flats where the yard must be used by two or more families. Of the 5,706 colored children reported, 642 live in flats, tenements, and apartments.

Table 56 shows the number of children who could have plats 20 by 20 feet, 20 by 40 feet, and 50 by 50 feet, or more.

TABLE 56.—Possibilities of school-directed home gardening.

WHITE CHILDREN.

Population of cities.	Number of children.	Living in apartments, flats, or tenements.	Can have garden space 20 by 20	Can have garden space 20 by 40	Can have garden space 50 by 50	Total who can have a home-garden plat.	Per cent who can have home-garden plat.
Over 25,000.....	11,261	1,417	2,508	1,104	1,966	5,578	49.5
From 10,000 to 25,000.....	2,489	480	631	338	702	1,671	67.1
From 5,000 to 10,000.....	2,044	118	475	174	822	1,511	73.9
From 2,000 to 5,000.....	3,988	193	418	804	1,786	3,008	75.4
Less than 2,000.....	2,070	69	134	560	1,112	1,708	82.4
Total.....	21,849	2,283	4,166	2,980	6,418	12,564	.....

COLORED CHILDREN.

Population of cities.	Number of children.	Living in apartments, flats, or tenements.	Can have garden space 20 by 20	Can have garden space 20 by 40	Can have garden space 50 by 50	Total who can have a home-garden plat.	Per cent who can have home-garden plat.
Over 25,000.....	3,237	480	631	338	181	1,150	35.5
From 10,000 to 25,000.....	724	81	115	41	236	392	54.3
From 5,000 to 10,000.....	292	3	21	62	42	145	49.5
From 2,000 to 5,000.....	1,258	78	298	427	74	791	62.5
Less than 2,000.....	195	16	16	427	142	158	81.0
Total.....	5,706	642	1,073	888	675	2,636	.....

As would be expected, the per cent of children who have large home-garden plats increases with the decrease in the size of the city.

The economic value of school-directed home gardens.—A large percentage of the children in the cities and towns of Alabama do not, at present, have any useful employment for their energies. In these cities there are enough unused back yards and vacant lots for every child to have a garden plat. To utilize these two unused assets would have a large economic as well as educative value. It would not be difficult for each child to grow \$20 worth of vegetables at present prices. For the 27,555 reported this would mean an aggregate value of over half a million dollars for the cities and towns of the State.

The public-school teachers were asked to estimate the average cost of vegetables, both canned and fresh and including potatoes, for an

average family of five persons for one year. No attempt has been made to check these figures by studying grocers' accounts and consulting housewives, as has been done in other surveys. The average of the Alabama teachers' estimates are listed below and compared with results in other cities of the same class where the problem has been studied.

Cost of vegetable foods for a family of five for one year.

Population of cities.	Alabama cities.		Atlanta, Ga.		Elyria, Ohio, white.	Richmond, Ind., white.	San Francisco, Calif., white.
	White.	Colored.	White.	Colored.			
Over 25,000.....	\$130.86	\$73.15	\$123.22	\$102.52			\$57.79
From 10,000 to 25,000.....	139.32	79.06			\$133.57	\$138.88	
From 5,000 to 10,000.....	131.55	63.01					
From 2,000 to 5,000.....	114.46	53.97					
Less than 2,000.....	86.36	40.50					

The plan.—To put the plan of school-directed home gardening into practice, it will be necessary to pay regular grade teachers an extra salary for work after school hours, on Saturday, and during the summer vacation. In the average school of seven grades (40 to a grade or 160 in the upper grades) only one such teacher will be needed. During the spring planting season, when the work is heaviest and time is limited, it will be an advantage to have two teachers for every 150 or 200 children who have gardens. These teachers should spend their time during out-of-school hours visiting the homes of pupils and teaching them to make back-yard and vacant-lot gardens. The teachers should interest the parents to co-operate with the children and to encourage them by paying for their products. Incidentally this home visiting of the teachers will bring about a better understanding between the school and the home.

The cost.—To put this plan into practice in all the cities of Alabama between 400 and 500 teachers trained in practical gardening will be needed. In a number of cities where the school-directed garden plan is being followed, the teachers are paid \$10 per month for the extra work during the school year and \$50 per month during the vacation. At this rate the total cost in Alabama for the garden season will be about \$200 per teacher, or from \$80,000 to \$100,000 for all the cities of the State. If, as an incentive to the cities, the State should provide an appropriation to pay half the salary for the garden work, a total appropriation of from \$40,000 to \$50,000 will be needed. For teacher training and administration of the work by the State department of education, \$10,000 additional should be provided.

If by this means the children should supply half the vegetables now used by the families, several millions of dollars would be saved to the city homes. Children could remain in school and yet be producers instead of consumers, as at present. In the age-grade tables (Chapter IV) 21,868 children are given as enrolled in the fourth, fifth, sixth, and seventh grades in cities and towns below 2,000 population, and 26,955 in cities of over 2,000 population, or a total of 48,833 children. As the reports were not received from all towns of under 2,000 population, it is safe to estimate that there are at least 50,000 children enrolled in the four upper grades of the grammar schools of the cities and towns of Alabama. If each of these children produces only \$20 worth of vegetables, the total value to the homes would be \$1,000,000. This is a very low estimate and might be easily increased to an average of \$50 per child, a total of \$2,500,000.

The garden teacher.—The teachers suggested for employment during out-of-school hours are designated as garden teachers, so that very definite and practical duties may be assigned. The services of these teachers to the child should be of a much broader scope. Every teacher is aware of the fact that the child back of the book and apparently very much absorbed is dreaming of many things not in the book. He looks at the book, but does not see. In the life of every child there are periods of dominant interests. He is the rancher, the gardener, the mechanic, and the great political and financial leader. His interest at that moment stirs to ambition of great and useful employment. These dominant periods of interest are the opportunities to be seized by the school and used to develop the highest type of useful individual. To give every child an opportunity to taste and weigh the value of his interests as they arise is real vocational guidance. The teacher raps on the desk, the child awakes from his dream with a start. He is in the schoolroom, but he does not find in the school a connecting link between himself and his dream, the ambition of his present interest.

The garden teacher will be a beginning in connecting the life of the child with the school. The height of the garden interest period is about the twelfth year. These teachers should also interest themselves in the many interests of children. They should be close to the life of the children and encourage them to come to them with their interests.

Teacher training.—The city superintendents of schools report 103 teachers now in service who are trained to teach practical gardening. To provide the trained teachers that will be needed for this work, one or more of the State normal schools or departments in State institutions delegated to train elementary teachers should be desig-

nated to establish special departments for the training of garden teachers. Of the white schools with normal training departments, the Alabama Girls' Technical Institute at Montevallo is best equipped for this work. Tuskegee and the Agricultural and Mechanical College for Negroes are the two institutions best equipped for the training of colored garden teachers. Both this school and the Alabama Polytechnic Institute should prepare teachers of this subject.

The above discussions summarized.—1. Thousands of children in the cities and towns of Alabama do not have any employment during the time they are out of school.

2. Because of lack of employment these children form habits of idleness rather than of industry.

3. Many children, because of lack of employment, commit offenses against the laws and peace of the State.

4. There are many distinct agencies working, through or outside of the schools, to promote out-of-school employment of rural children; but at present there are no permanent agencies working to promote the educational occupational employment of city children.

5. School-directed home gardening offers a most practical educational employment for city children.

6. There is much land available for gardening in the cities and towns of Alabama.

7. It would be practicable to employ part-time teachers to promote occupational employment for children during out-of-school hours.

8. The cost of such teachers would be small as compared with the money value of the product, and the educational value would be incalculable.

9. Since the occupational employments of children are educative, their direction is a function of the public schools.

10. The normal departments of the Alabama Girls' Technical Institute and the Alabama Polytechnic Institute should train white garden teachers, and Tuskegee and the Agricultural and Mechanical College for Negroes should train colored garden teachers.

11. In the interest of efficiency and economy all occupational employments (club work, home demonstration work, and city gardening) should be an organic part of the educational system of the State.

12. All of the agencies now engaged in the promotion of out-of-school employment activities, both city and rural, should be put under the direction of one person who should coordinate his work with other divisions of the State department of education as directed by the State superintendent of education.

Specific recommendations.—The survey committee recommends that steps be taken to enact legislation or to formulate administrative regulations for—

1. Placing the administration of the educative employments of children, both city and rural, under a single State supervisor, who shall be an official of the State department of education, and who shall be given such associates as may prove to be necessary.
2. Holding the State department of education responsible for the organization of the out-of-school employments of school children.
3. Providing funds to pay the assistant supervisor of educational employment in cities, and half the extra salary of part-time teachers of school-directed gardening in cities and towns.

Chapter XVIII.

THE TEACHERS OF ALABAMA AND THEIR CERTIFICATION.

Effect of the war on the teacher supply.—Alabama can not have a satisfactory system of schools without well-prepared teachers. How to provide an ample supply of professional teachers has always been a difficult problem. In this respect Alabama is not different from other States. The country at large faces the same difficulty; largely, no doubt, because in the United States the teaching profession has not been held in the high esteem that is its due. The average American is inclined to judge people by their money incomes instead of by the type of service they render. Because teachers are so poorly paid, they seldom hold in the community that high social position that is their due by right of the importance of their service to the public. Inadequate salaries and indifferent social status have kept many capable persons out of the profession.

Low salaries generally result in correspondingly low professional preparation. Almost any kind of amateur can gain admittance to the profession by the easy examination route, and thereby discourage more ambitious persons from entering the professional schools and taking expensive training.

Even before the war it was difficult to procure and retain well-prepared teachers. After the country's entrance into the war the problem became greatly intensified. Now is the time, therefore, to drive home to the people what is necessary before better things can be obtained in the field of professional teaching. The public will have to become fully aware of their responsibility toward the teachers; they will have to make the schools and housing conditions more attractive than they now are and in other ways make feasible long, well-paid tenures in the same community. The State must by legal enactment safeguard the profession and offer special inducements to all teachers to equip themselves well for their life work. With this as a basis the teachers will be more willing to strive for higher professional standards.

Teaching rewards should bear a definite relation to the experience and time incurred in securing the teaching certificate and the professional knowledge and skill which come from successful experience.

Salaries ought, accordingly, be based on the type of certificate held. There should in every State be a legal minimum salary for each grade of certificate. Similarly a second year in the same school community ought to be awarded with a State grant of a definite sum; a third year with double the above sum; and the fourth and each subsequent year with treble the first sum. These bonuses should always be in addition to the salaries paid by the school community or county board.

Paradoxical as it may seem at first thought, the remedy for an ample supply of well-prepared teachers should be sought in gradually increased professional requirements of all teachers. While during the war period it was impracticable to legislate against admission to the teaching ranks by the ordinary examination route, the present is probably the right time to look forward to ending this practice as soon as possible. The teacher in the effective community school of the future may be expected to come into service from the professional teacher training schools only. This, together with increased salaries and improved living conditions, will help to dignify the profession and place it on the higher level which it should always have held, but which in recent years seems to have been largely lost to the American teacher.

Who the Alabama teachers are.—Before going deeper into the subject of remedial suggestions it is well to know more about the teachers who are entrusted with the education of the children in Alabama. Who are they? How many are they? What is their preparation for teaching? What is their social status? Are they permanent teachers or mere makeshifts?

Alabama is a large State and requires quite an army of teachers to "man" the 4,712 white, and 2,007 colored schools. The teaching staff consists (1918) of 11,766 teachers, of whom 9,050 are white and 2,716 are colored. The compulsory attendance law has already had some effect on increasing the number of children in school, as may be seen from the fact that the white teachers increased from 8,351 in 1917 to 9,050 in 1918. But during the year the number of white male teachers decreased from 2,359 to 2,025. This loss is largely attributable to conditions occasioned by the war, but it makes the situation none the less serious when one realizes that the number of women employed "was already in excess of a reasonable proportion." Alabama is in real danger of having its schools feminized.

The schools for colored children have increased in number from 2,572 in 1917 to 2,716 in 1918. The small increase in number of schools is probably because the effects of the compulsory attendance were practically neutralized by the continued loss in colored population due to the northward migration.

Married and single teachers.—Twenty-seven per cent of the rural and village teachers reporting are married. This number is some-

what larger than for the United States as a whole. The latter being 18 per cent of the whole number employed, according to a recent study made by the Bureau of Education. The married teachers are mostly older men and not of the type of young and enthusiastic instructor, well prepared and understanding the needs of modern education. The latter type of male teacher and his family can not be attracted to the rural or village school unless permanent community schools with good housing facilities are established for them.

A few of the married teachers are women whose husbands are in Government service. Some of them have proved themselves able teachers. It would be worth while, the committee is inclined to believe, to induce married women—one-time teachers—with grown families to take a short professional course and reenter the profession. A married woman who has gone through the experience of rearing a family

WHERE 3,648 ALABAMA TEACHERS MAKE THEIR HOMES

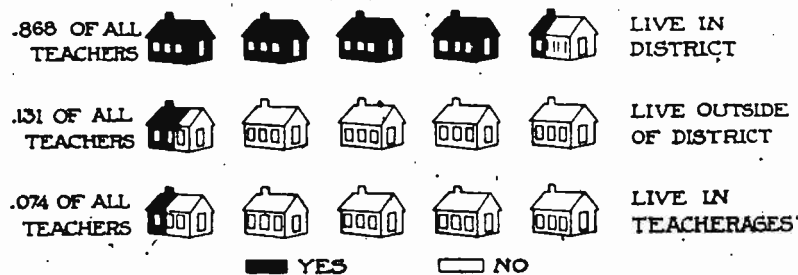


FIG. 80.

can be counted on to understand children at least—and this is more than can be said for some of the young teachers now in the schools.

Residence of the teachers.—Of the 3,648 rural and village teachers answering the questionnaires only 271, or about 7.5 per cent, live in homes provided by the community; 3,170 board and lodge in the school districts; and 478 spend the school day only in the district, living elsewhere. A teacher who devotes only 6 or 7 hours daily for five days in the week to his school community can mean nothing as a local community leader. Fortunately, this group is small. The teachers who reside in the district throughout the school term are more numerous. But many of them spend the week-end in town—for which it is hard to blame them—at the very time they are needed for the Friday evening literary society or the Saturday evening farmers' club and the Sunday Bible class. But the small group of teachers who are provided with permanent homes are better off. They are strategically situated for community leadership, and if they fail in this important educational work, it is because of in-

capacity and unfitness to hold the important teaching office. Every section of Alabama should be encouraged to erect homes on the school premises for their school principal and his helpers.

Lack of permanence in the teaching profession.—Teaching as a profession needs stabilizing, and the opportunities in teaching must be made the equal of opportunities in other callings. Without this neither Alabama nor any other State can expect any large number

PERMANENT AND MAKESHIFT TEACHERS (3,648 TEACHERS)

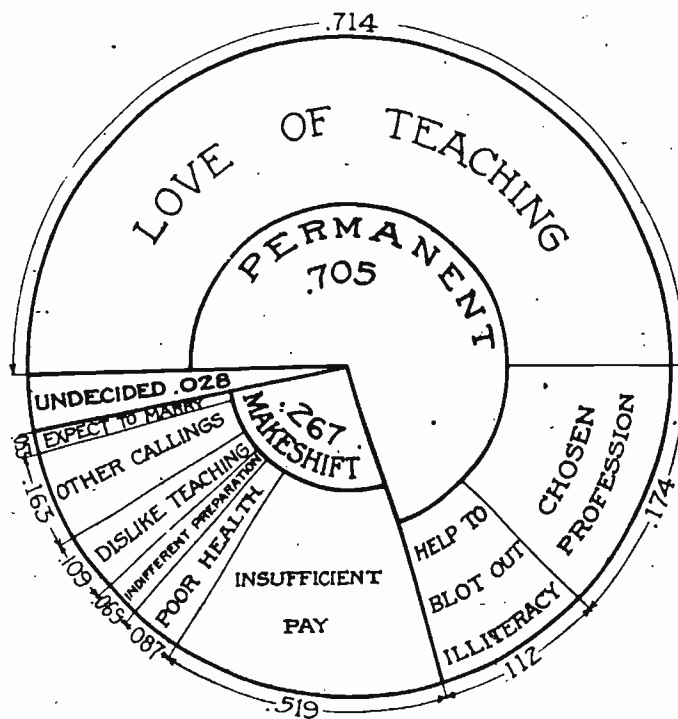
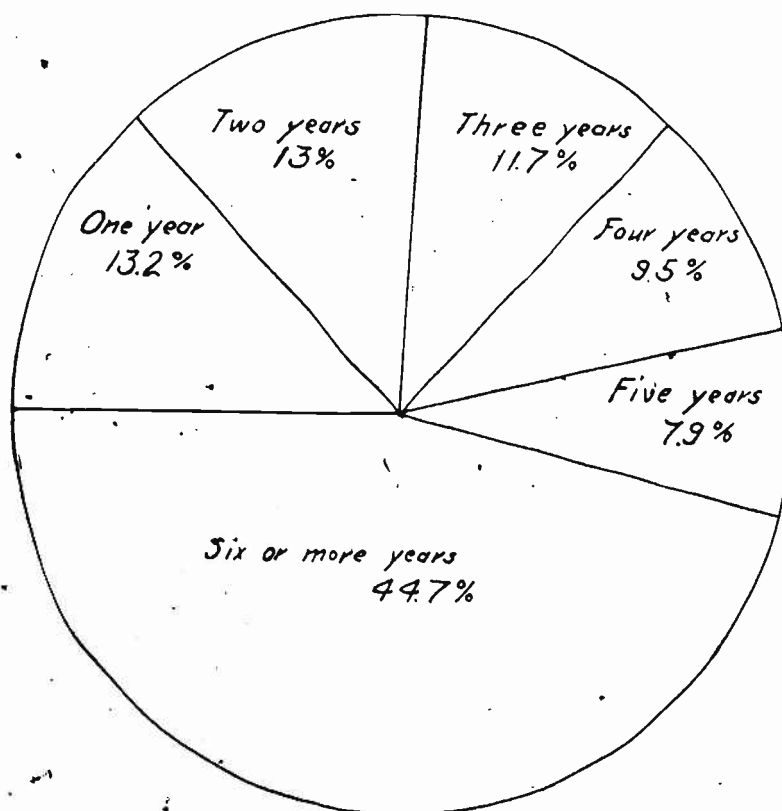


FIG. 31.

of well prepared, experienced men and women to go into the teaching profession and remain there.

Figure 31 is a graphic illustration of the truth of this statement. It is based on answers from 3,648 rural and village teachers. Of these teachers 26.7 per cent declare frankly that they do not intend to make teaching their life work. And why? Of this number 51.9 per cent pronounce the pay wholly inadequate, so much so that they can not make ends meet; 8.7 per cent have impaired their health in the in-

sanitary schools in which they have been obliged to work; 6.9 per cent find themselves poorly prepared for teaching and wisely enough have concluded to quit; while 10.9 per cent declare a dislike for teaching—quite likely fostered by the unwholesome surroundings, poor buildings, lack of equipment, etc., in the midst of which they have been obliged to struggle along from day to day. Sixteen and three-tenths



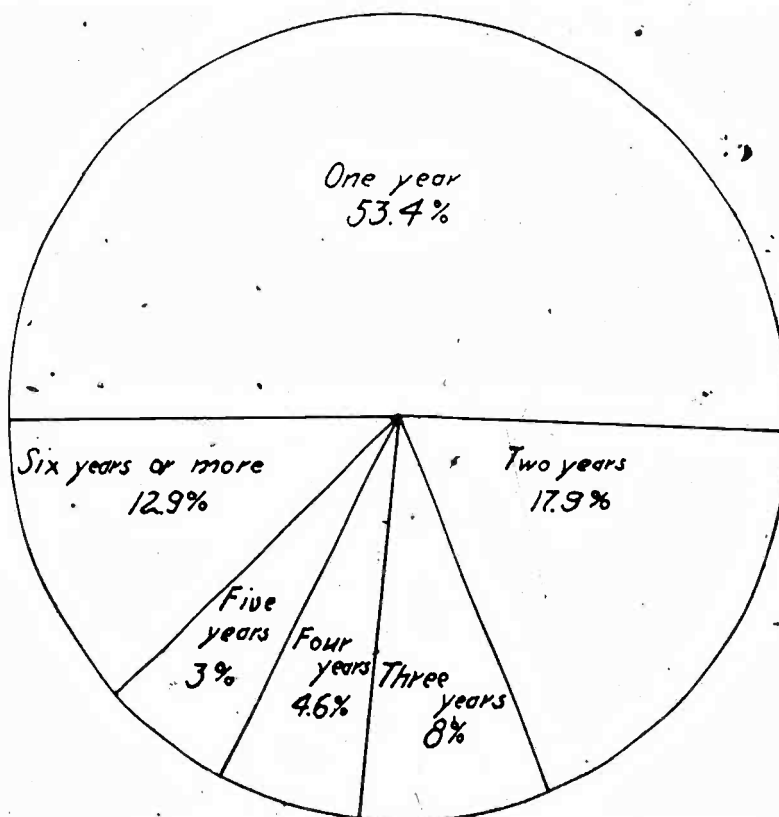
TEACHERS' EXPERIENCE IN YEARS

FIG. 32.—White teachers.

per cent are attracted to more lucrative employment and, finally, 5.3 per cent expect to marry soon.

Two and eight-tenths per cent of the teachers are undecided and may or may not continue to teach—depending somewhat on circumstances. On the other hand, 70.5 per cent of the whole number assert that they intend to remain permanently in teaching. This is really a larger number of so-called permanent teachers than is usually found in the average State. Thus, a survey recently made by the

Bureau of Education of South Dakota discloses the fact that only 42.7 per cent of the teachers interviewed class themselves as permanent. This, at first glance, shows a more serious condition than in Alabama. However, the Alabama study includes both white and colored teachers. It is striking to know that while only 57 per cent of the white teachers declare their desire to pursue teaching per-



TEACHING EXPERIENCE IN SAME LOCALITY

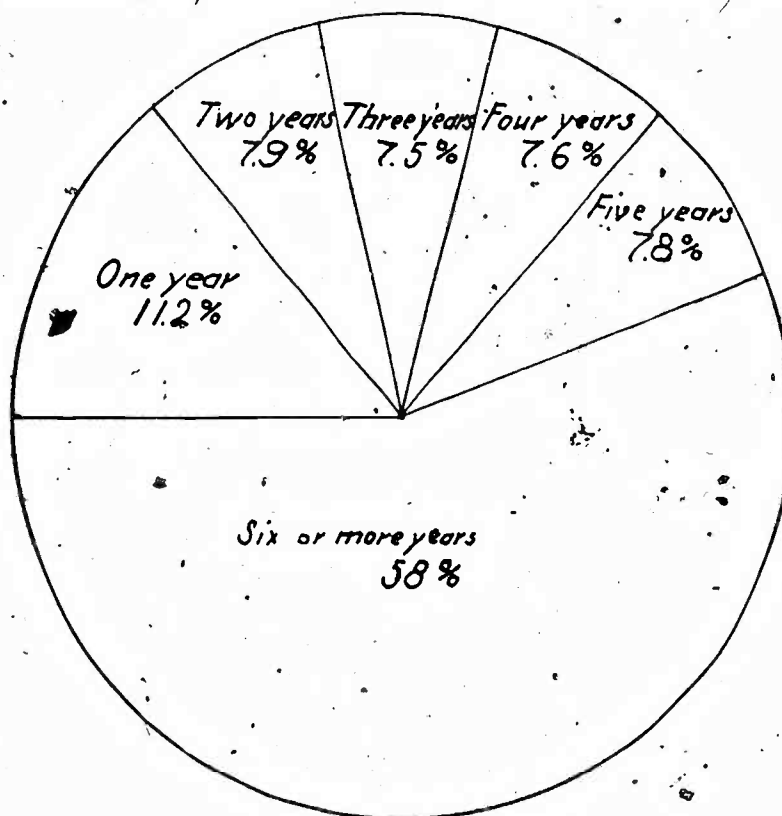
FIG. 88.—White teachers.

manently, nearly 90 per cent of the colored teachers express their eagerness to make teaching their life work. This brings Alabama's average for permanent teachers to 70.5 per cent. The explanation of the large per cent of the permanent teachers among the colored is evidently in the limited professional field open to colored persons of culture and learning.

Seventy-one and four-tenths per cent of the teachers wish to follow the calling for love of the work; 17.4 per cent have nothing better

to do, and 11.2 per cent appear to have the missionary motive and desire to help their fellow men. Especially do they seem eager to help rid Alabama of illiteracy.

Many additional reasons are given for dissatisfaction, many of them leading the teachers ultimately to give up teaching. Eleven hundred teachers complain of their living conditions; lack of modern



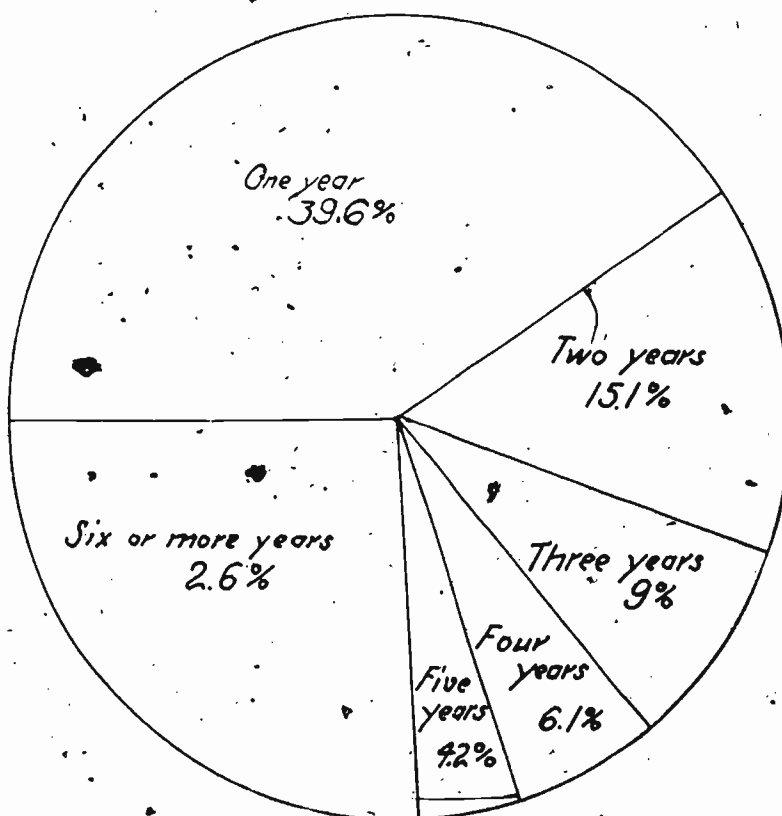
TEACHERS' EXPERIENCE IN YEARS

FIG. 34.—Colored teachers.

conveniences, insanitary, unheated rooms, lack of privacy, poor cooking, loneliness, and want of wholesome social attractions. These and other reasons enumerated are sufficient to explain why teachers do not look forward to long permanent tenures in the schools of Alabama.

Length of tenure.—How long are the teaching "lives" of the Alabama teachers and how long do they remain in the same school

community? Of 3,848 rural and village teachers reporting, 17.6 per cent were in their first year, 19.9 per cent in their second year—which also marks the high point numerically—and 17.4 per cent were in their third year. From here onward the decline in years was rapid. Thirteen and four-tenths per cent were in the fourth year, 9 per cent in the fifth, 6.5 per cent in the sixth, 5.5 per cent in the



TEACHING EXPERIENCE IN SAME LOCALITY

FIG. 35.—Colored teachers.

seventh, 4 per cent in the eighth, and 6.8 per cent, all told, above eight years.

More complete figures are gleaned from the enrollment cards of the State institute for the current year. They place the average teaching experience at nearly six years, and the average teaching experience in the same community at two years. These figures include city teachers who are much better stabilized than the rural and village teachers and consequently help to raise the averages both in total tenure and length of tenure in the same place.

Academic and professional preparation.—This paragraph limits the discussion to rural and village teachers. The preparation of city teachers is given in detail in Chapter XII. Some pages of that chapter might well be studied in conjunction with the present paragraph to convey to the reader the difference in qualifications required of city teachers and rural and village teachers. Yet why should the State

PER CENT OF ALABAMA TEACHERS WITH HIGH SCHOOL OR COLLEGE ATTENDANCE WITH YEARS IN EACH. (BASED ON 3,648 TEACHERS)

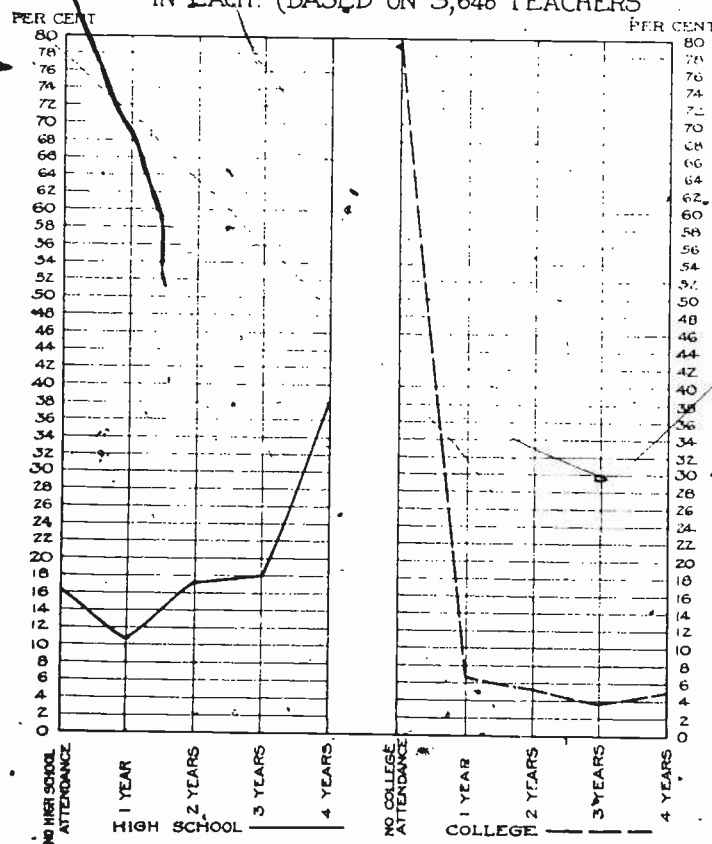


FIG. 88.

require less preparation of the teachers who instruct in the open country and in the rural villages where the educational problems are both more numerous and more difficult than in the cities? The answer is this: The State is certain to continue to be satisfied with lower qualifications in these places until the people realize the importance of rural and village schools to the life of the State, and are willing to pay for this service what it is worth—then, and not before, will it

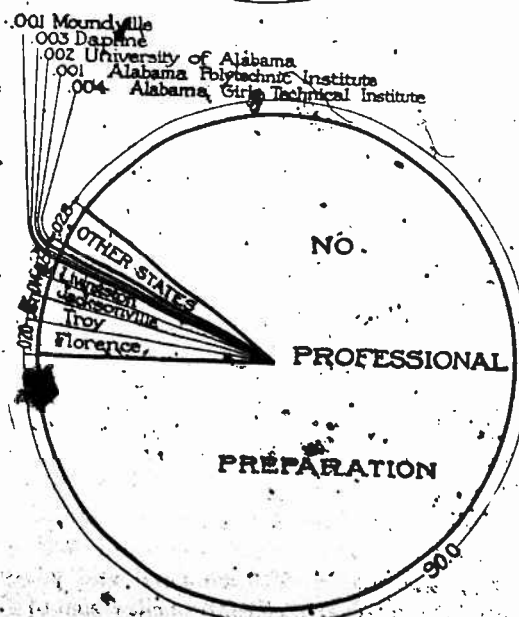
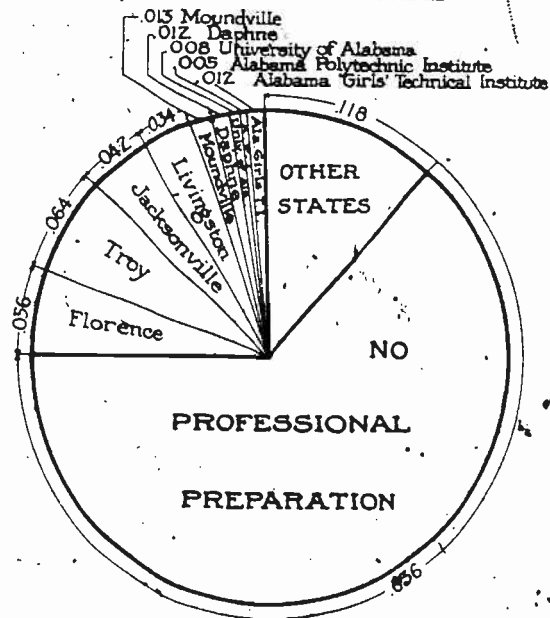
be possible to procure strong teachers; then will the time be at hand for educational requirements to be increased largely.

In the group of 3,648 rural and village teachers reporting to the committee fully 16 per cent have completed only the elementary school course, and have slipped into the profession by the examination route. Ten and one-sixth per cent of the teachers have spent one year in high school, 17.2 per cent have spent two years in high school, 18 per cent three years, and 38 per cent four years. This includes both white and colored teachers. Twenty per cent of the teachers have had college or university attendance ranging from one to four years—4.7 per cent completing four-year courses and graduating. Many teachers reporting have passed from the elementary school direct to the normal schools or other teacher-training institutions. However, 63.6 per cent of the whole number report no professional preparation whatever. If due allowance were made for the large number of purely academic students in the normal schools and other schools designated in the questionnaires, it is quite certain to appear that less than 20 per cent of the whole number have really pursued professional studies, and only about 8 per cent have actually graduated from teacher-training institutions. This is a much smaller number than is credited with professional attendance and graduation in the annual report of the State department of education. But the report includes the whole number of city teachers. This raises the average percentage considerably. It can not be far from correct, therefore, to assert that not more than 10 per cent of the teachers now teaching in Alabama are professionally prepared teachers.

Teachers' salaries.—It would need no mathematician to figure out why so few teachers in Alabama spend their time and money on professional preparation. The salaries paid are so low as to offer neither incentive to professional preparation nor encouragement to long tenure. Alabama ranks in the next to lowest tier of States with an average salary of \$344 per year. The State superintendent's report for 1918 shows very slight increases in salary, if any, during the last biennium. It gives the average annual salary of white male teachers at \$437 as compared with \$431 for the preceding year. The average salary of white women teachers was \$367 as compared with \$363 in 1916-17. In the case of teachers in rural white schools the average salary for men was \$377 and for women \$321 as compared with \$367 and \$304, respectively, for the preceding year. In urban schools there was a decrease from \$1,348 to \$1,347 and from \$595 to \$575, respectively, for men and women. Colored teachers were paid much less.

Figure 38 gives the salaries of 3,885 rural and village teachers. Of these teachers 20.9 per cent receive the paltry sum of \$100 to \$250

WHERE SOME ALABAMA TEACHERS
ACQUIRED THEIR PROFESSIONAL PREPARATION
3,648 TEACHERS ATTENDED



AND THESE GRADUATED

FIG. 87.

per annum; 36.8 per cent—the largest number in any one group—get from \$250 to \$400. It can not now be expected that qualified persons will continue to teach or that capable persons will prepare for teaching unless radical and sweeping changes are made in the salary scales.

TEACHERS' SALARIES BY GROUPS (3,648 TEACHERS)

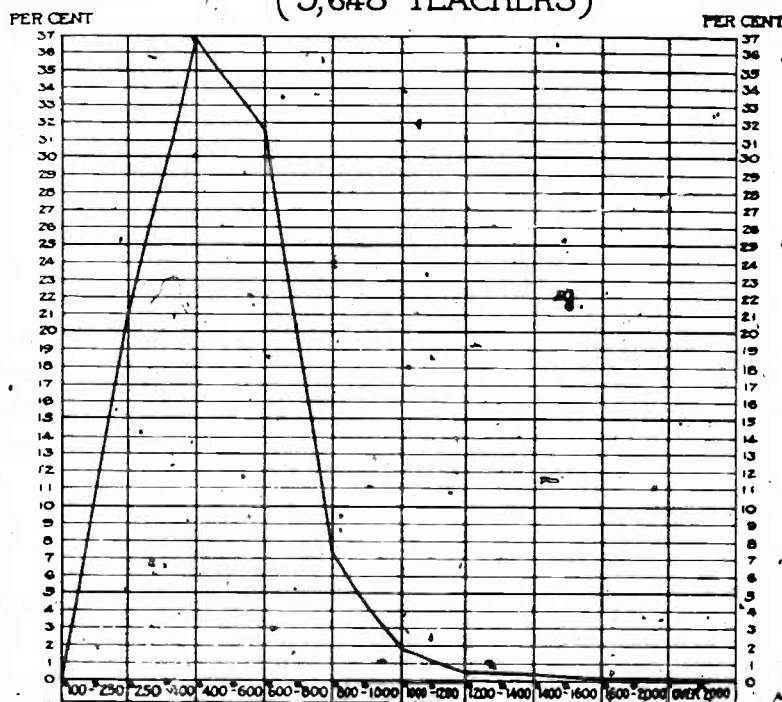


FIG. 38.

The cost of living in the United States has increased at a startling rate since 1913, as is indicated in the following increases:

	Per cent.
Food.....	83
Clothing.....	108
Drugs.....	103
Fuel.....	58
House-furnishing goods.....	75

This shows that it costs the teacher about twice as much to live in 1919 as in 1913. During this six-year period Alabama teachers have averaged an increase in salary not exceeding 11 per cent!

What the teachers save on their incomes.—Figure 40 tells a graphic story of what the teachers save. In the questionnaires 51.4 per cent declare that they save absolutely nothing, and a small number in the

AVERAGE SALARIES OF WHITE AND COLORED TEACHERS BY COUNTIES FOR 1918.

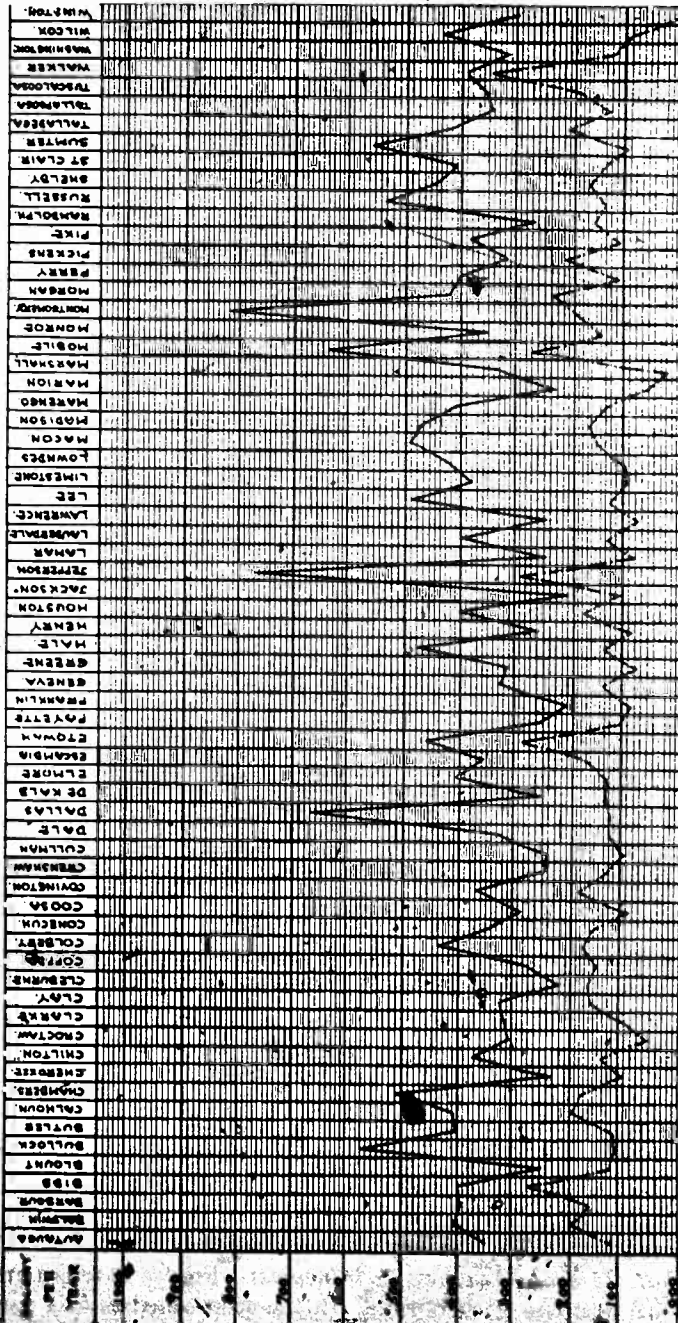


FIG. 89.—This figure indicates a surprising variation in salaries paid teachers in the different counties

group "have to borrow money to get through the summer"; 40.9 per cent save "very little"; and 4.7 per cent "enough to span over the vacation." Finally 3 per cent of the whole number of rural and village teachers save some portion of their salaries—and what these few save is only from 10 to 20 per cent of their incomes.

The teachers, underpaid as they are, often have one or more persons depending on them for support. Some have dependent parents, others are trying to educate brothers or sisters, while others are

WHAT ALABAMA TEACHERS SAVE FROM THEIR ANNUAL SALARIES (3,648 TEACHERS)

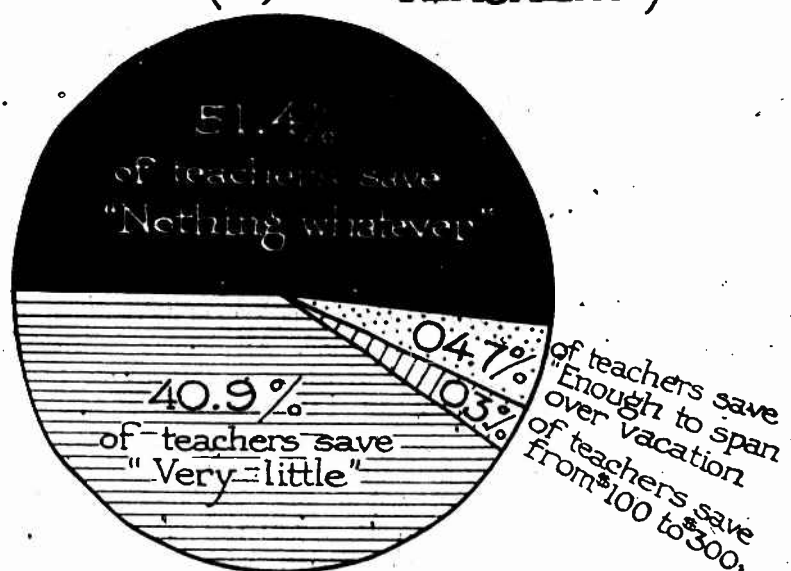


FIG. 40.

married and have their family responsibilities. Of these teachers 16.2 per cent have one dependent; 15.1 per cent have two; 17.2 per cent have three, and 7.8 per cent have more than three.

Importance of an effective certification system.—The time is long since past when the American public could afford to intrust the education of their children to the uneducated and untrained as has been done in the past. Educational quackery is just as bad as medical quackery, and should be as little tolerated. The demand for professional preparation of teachers is well put by the late J. Sterling Morton, of Nebraska, as follows:

We demand professionally trained teachers, men and women of irreproachable character and well-tested abilities. We demand from our legislature laws rais-

ing the standard of the profession and exalting the office of the teacher. As the doctor of medicine or the practitioner at law is only admitted within the pale of his calling upon the production of his parchment or certificates, so the applicant for the position of instructor in our primary and other schools should be required by law to first produce his diploma, his authority to teach, from the normal schools.

We call no uneducated quack or charlatan to perform surgery upon the bodies of our children lest they may be deformed, crippled, and maimed physically all their lives. Let us take equal care that we intrust the development of the mental faculties to skilled instructors of magnanimous character that the mentalities of our children may not be mutilated, deformed, and crippled to halt and limp through all the centuries of their never-ending lives. The deformed body will die and be forever put out of sight under the ground, but a mind made monstrous by bad teaching dies not, but stalks forever among the ages, an immortal mockery of the divine image.

The ultimate aim in every State should be—

1. To limit candidates for teaching credentials to graduation from standard teacher-training institutions or the full equivalent thereof.
2. To vest the power of certification exclusively in the State department of education.
3. To issue differentiated certificates for elementary, secondary, and special subject teachers.
4. To adjust all basal salaries to the kind of certificate held by the teacher.

The Alabama system of certification.—The system of certification used in this State is fundamentally sound. All regular certificates are issued by the State department of education through its State board of examiners which is composed of the State superintendent as ex officio president and two appointive members. Under the law the State board of examiners is authorized (1) to issue certificates on graduation to accredited schools and on direct examination; (2) to extend the life of certificates already issued; and (3) to validate credentials and certificates from other States.

The board of examiners issues certificates on the basis of graduation without examination to the four class A normal schools, the Alabama Girls' Technical Institute, schools of other States with similar standards, and also to graduates of standard institutions of Alabama and other States who have completed at least 14 semester hours of professional study prescribed by the board of examiners. The following higher institutions of learning in Alabama are rated as standard institutions (i. e., four years of college work above four years' high school with adequate instruction in professional subjects), and are granted certificates without examination: University of Alabama, Alabama Polytechnic Institute, Alabama Girls' Technical Institute, Howard College, Birmingham-Southern College, Women's College, Judson College, Athens College, and the four class A normal schools at Florence, Jacksonville, Troy, and Livingston. Talladega

College, a higher institution for colored students, has also recently been accredited for certification without examination. This is the only Negro institution in Alabama on the accredited list.

The State grants four regular certificates. They are:

1. *Life certificate*.—Granted to teachers of high degree of proficiency and professional attainments on the basis of five-year teaching experience.
2. *First grade*.—Granted on examination and on graduation; valid for six years; examination in all subjects required for second-grade certificate and in addition thereto, algebra, geometry, physics, elementary psychology, the school laws of Alabama, and advanced English.
3. *Second grade*.—Granted on examination; valid for four years. Examination in all subjects required for third-grade certificate and in addition thereto

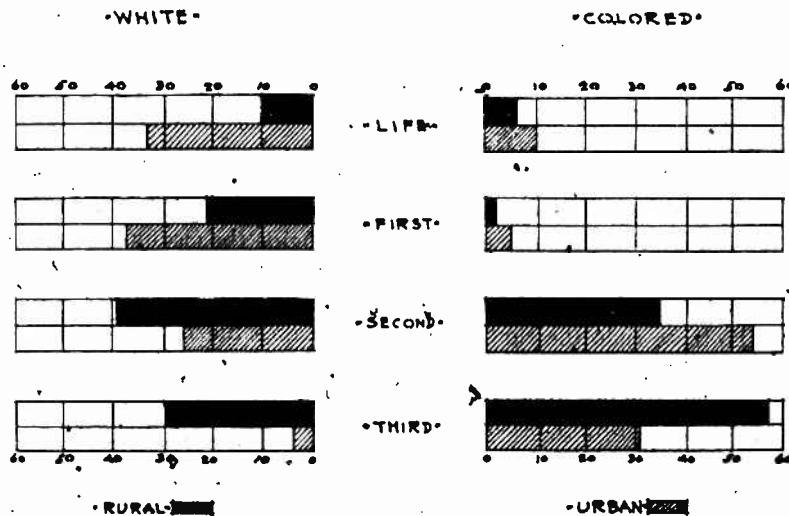


Fig. 41.—Teachers' certificates on a percentage basis.

advanced requirements in arithmetic, history of Alabama, English grammar and literature, intermediate geography, United States history and civics, and class management.

4. *Third grade*.—Granted on examination; valid for two years; examination in arithmetic, reading, penmanship, grammar, practical arithmetic, United States history, geography, elementary principles of physiology and hygiene and agriculture, and theory and practice of teaching.

Under the present law every grade of certificate (except life) may be extended for one year at a time for a total of not more than four consecutive years, provided the holder of such certificate has pursued professional study approved by the board for as much as six weeks in some standard educational institution within the 12 months immediately preceding the expiration of the applicant's certificate.

The total number of applicants for certificates in 1917-18 was 10,160. Of these 4,352 applicants failed to pass their examination.

The 5,798 who received certificates were grouped as follows: Life certificate, 90; first grade, 803; second grade, 1,679; third grade, 2,226.

Only 431 teachers were certificated upon graduation from teacher-training institutions. This is a startling commentary on the present inadequacy of the teacher-training institutions of the State, or more correctly speaking, on the regrettable failure of the would-be teacher to utilize these schools as a means of entrance to the profession. Alabama needs about 2,300 new teachers annually. If only 430 come from the professional schools, 1,870 must be recruited from the elementary and secondary schools, immature and inexperienced and with no professional preparation whatever. Here lies the most serious weakness in the whole school system.

Specific recommendations.—Alabama has a long way to go before its teachers are professionalized. The chief responsibility rests on the people and the legislature of the State and not on the teachers. Let the public become fully aware of its responsibility in the matter and the teachers will quickly enough respond. Let the public make the school plants and housing facilities more wholesome and inviting; offer the teachers better inducements by way of long, secure tenures, and satisfactory salaries; and provide the means of preparation. Capable young men and women will then be ready to invest their time and money in preparation for teaching.

To these ends the survey committee makes the following specific recommendations:

1. Improve teaching conditions by—

(a) Establishing reasonable minimum salaries for all teachers.

(b) Scaling all teachers' salaries to the grade of certificate held, thus placing a premium on special preparation.

2. Require higher teaching qualifications by—

(a) Increasing, gradually, the entrance requirements of the State normal schools and lengthening their study courses.

(b) Discontinuing the issue of certificates on examination as soon as the normal schools, the Alabama Girls' Technical Institute, the school of education in the University of Alabama, and department of education of the Alabama Polytechnic Institute, and other teacher-training institutions have become fully equipped to supply all the professional teachers required.

(c) Placing the minimum requirement for permission to teach at graduation from an accredited four-year high school, or its equivalent, and, in addition, at least one year's professional study acquired at a professional school for teachers. The standard to go into effect not before September, 1928.

3. Increase the supply of professional teachers by—

(a) Organizing teacher-training departments in the county high schools and other accredited high schools which meet the require-

ments of the State department of education; the schools to receive State aid.

(b) Establishing well-equipped departments for rural teachers at all the normal schools.

(c) Enlarging the facilities of the Alabama Polytechnic Institute to prepare teachers of general agriculture and teachers of vocational agriculture and home economics.

(d) Granting State bonuses to teachers as rewards for long service in a single school community.

(e) Establishing a retirement fund for teachers.

Chapter XIX.

PREPARATION OF PUBLIC-SCHOOL TEACHERS IN THE STATE NORMAL SCHOOLS.

General conditions.—The problems of teacher training in Alabama do not differ greatly from the problems in many other States. As in other Southern States it is complicated somewhat by the dual system of schools required for the white and colored races. As was shown in the preceding chapter, approximately 10 per cent of the white teachers are normal graduates or the equivalent, and an additional 10 per cent had some professional training. Eighty per cent of the white teachers of the State and over 95 per cent of the colored teachers have had no special training for their work. This grave situation needs careful examination with a view to providing remedies.

Among the reasons for this unfortunate situation two may be restated here:

1. The certification law and system which at present exist permit wholly unprepared persons to enter the teaching ranks.
2. Although a number of improvements have been made in the State normal schools in recent years, the provisions for the training of teachers are still wholly inadequate.

At present there are two routes in Alabama to the teacher's desk:

1. A prospective teacher may complete the ninth grade of the public school system and then take a four-year course at a State normal school or other standard teacher-training school or complete the eleventh grade and take a two-year professional course. This plan leads to a first-grade certificate.

2. The prospective teacher may avoid the long and expensive course of preparation and by a little cramming pass examinations in a few subjects and secure a teacher's certificate. Why should an ambitious young person finish a high-school course and then spend two years in a State normal school when with a very small amount of high-school preparation and a little special review she can reach her goal by taking an examination? If the normal graduate gets a slightly larger salary it is because she has demonstrated that she is a better teacher. She is given no initial advantage in the way of a higher remuneration.

It is not contended that all the teachers who have had no special professional training are poor teachers. This would be far from the truth. Neither is it contended that professional training will make a good teacher out of every person. It can not be gainsaid, however, that the skill acquired by practicing untried methods on little children and experimenting on them is acquired by a slow method and a criminally wasteful one. If each blacksmith had to learn the arts of his craft by unguided practice, long, indeed, would be his apprenticeship, and much of the skill of one generation would not be passed on to the next.

Those who criticize the normal schools of Alabama as not fulfilling their functions because they turn out only about one-tenth of the new teachers needed each year forget the fact that these schools are doing a wonderful work in supplying such a large percentage of teachers as they do, considering the fact that there are gaping doors to the teacher's desk on this side of the normal school. The teacher-training situation in Alabama is in much the same position as that of medical training a generation or two ago. At that time almost no professional training was required as a prerequisite to the practice of medicine. The medical schools had meager equipment, short courses, and few students. Would it have been fair under such circumstances to criticize the medical schools for not furnishing a sufficient supply of trained physicians? Would it be reasonable to hope that by improving the medical schools, raising standards for admission, and lengthening their courses there would be a very material increase in the supply of professionally-trained physicians? Was not the plan followed the most sensible one, namely, a requirement of professional training as a prerequisite to a license to practice medicine? If the people of Alabama are to have trained teachers for their children, they must require professional training of all applicants for teachers' certificates.

The methods to be employed in making such a requirement and yet not working an injustice to the many excellent teachers now in service, and also to avoid a teacher shortage, have already been pointed out in this report. Briefly, the recommendation is that after July 1, 1921, no new teachers' certificates shall be issued without satisfactory evidence of academic and professional training on the part of the applicants, the amount to be increased gradually year by year. Closely related to this is the recommendation that increased remuneration shall be given the professionally-trained teacher. The success with which similar plans have been worked out in other States warrants the committee in urging this as one of the most important considerations devolving upon the present legislature.

• In addition to the four normal schools of class A and the accredited colleges enumerated in chapter 18, the following nonaccredited schools

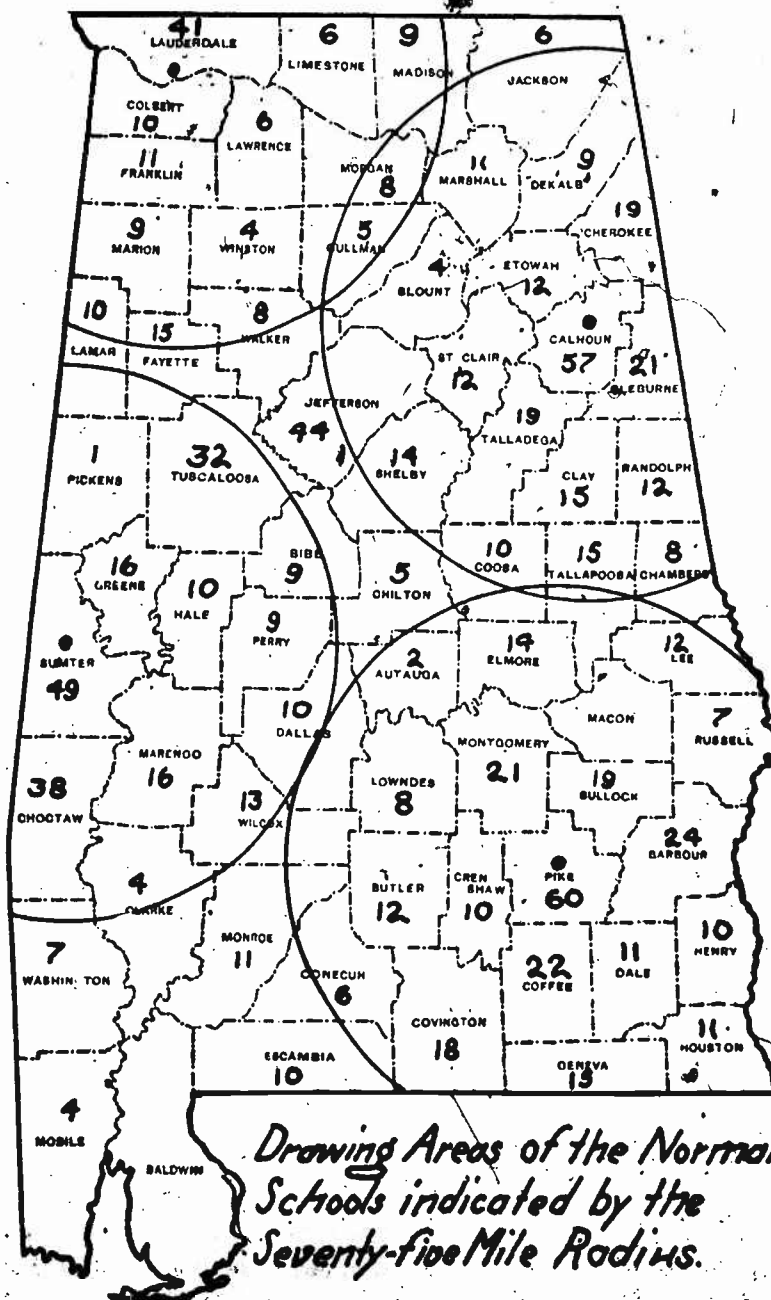
are engaged in teacher-training work: The two class B normal schools at Moundville and Daphne, Tuskegee Institute (colored), the normal school at Montgomery (colored), and the Agricultural and Mechanical College at Normal (colored).

The logical division of work among the State teacher-training institutions of Alabama for the present and probably for some time to come is as follows: The State University should train teachers of academic subjects in high school, superintendents, principals and supervisors for city and county school systems, and teachers of vocational industries as at present arranged; the Alabama Polytechnic Institute and the Agricultural and Mechanical Arts College should train teachers of agriculture and of closely allied subjects; the normal schools should train teachers for the elementary schools; the Alabama Girls' Technical Institute should train elementary and secondary teachers and supervisors of home economics.

With minor exceptions this is the division of work as now carried on, and the management at each institution seems to recognize this natural and logical program. There are many anomalies in the situation, such as the State maintaining several normal schools and not accrediting them and legally certificating their graduates, the maintenance of summer schools for elementary teachers at the State University and Polytechnic Institute and admitting students to them who could not qualify for entrance, the partial duplication of teacher training in technical and vocational subjects at the two major institutions of collegiate rank, etc. Geographic, industrial, social, and historic conditions seem to justify most of these anomalies. If the program is carried out for creating the standard of professional training which the committee proposes some readjustments will gradually be made. Great demands will be made upon the normal schools and their functions will naturally expand, as will those of other teacher-training institutions.

I. NORMAL SCHOOLS OF CLASS A.

The State normal schools at Florence, Jacksonville, Livingston, and Troy have been very wisely classified as the major training schools of the State for preparing white teachers for the elementary schools. The plan of accrediting institutions for the training of teachers on basis of the equipment, faculty, course of study, and character of work done, is excellent. The State is to be congratulated upon the courageous actions of the board of trustees of the State normal schools in rigidly delimiting the scope and functions of these schools. The reports of the board show a clear conception of the teacher training problems of the State. The committee would remind the board that much courageous work is still to be done to raise these schools to the highest standard.



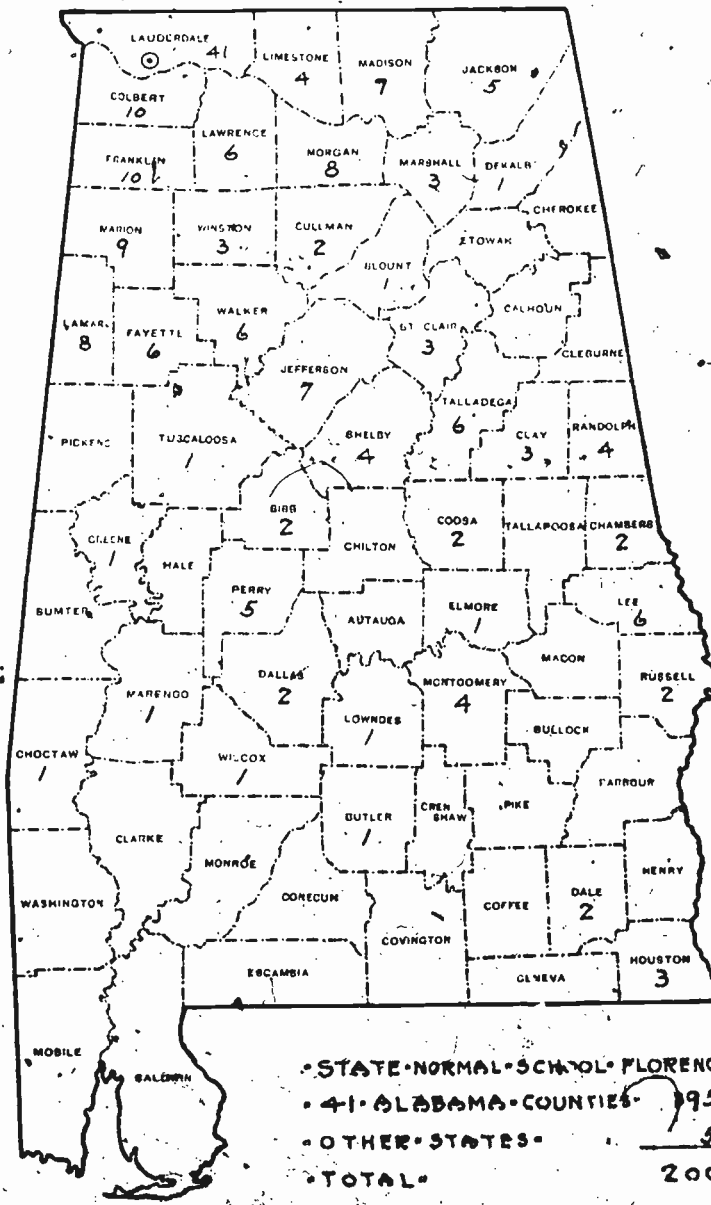
Map. 10.

Location of schools and distribution of students.—While the schools are not located in the larger cities of the State and do not have as good railway facilities as might be desired, an inspection of the maps showing the distribution of their students during the current school year shows that each school has a good distribution within its own particular territory and that there is a very equitable representation from over the State as a whole. An examination of the maps shows that each school receives a majority of its students from within a radius not to exceed 75 miles. There is nothing unusual in this fact because a statement approximating this may be made for even the greatest educational institutions of this country. Oddly enough, the school at Florence, in spite of its location in an extreme corner of the State, has the widest distribution of students, the average mileage of these students probably being greater than even that of the students at the State university.

The map showing the total distribution of students at the four normal schools is worthy of careful study. It shows that there is a teacher-training influence permeating the entire State and that these institutions are splendidly serving the Commonwealth. It would indicate, too, that the question which has often been raised of abolishing these schools and establishing a single teacher-training institution is not well taken. If these normal schools are given adequate support they will render a State-wide service which could not be given by a single institution. A proposition has been made to remove the State normal school now located at Livingston to Selma. The arguments in favor of this, and there are many, would not affect the general proposition that the State of Alabama needs four well-maintained normal schools.

Control.—These normal schools are wisely placed under a single board of control. This insures their treatment as State institutions rather than as local schools. Elsewhere in this report will be found recommendations as to some changes in the plan for the control of these and other State educational institutions. While there seems to be no evidence of any unfortunate effects resulting from the occasional appointment which has been made of resident members of the board, the committee believes it to be especially important that each school be legally safeguarded against the appointment of local or resident members of the board.

Buildings and equipment.—Each of the four State normal schools has a good dormitory for women, with reasonably adequate equipments for boarding departments. These dormitories have been recently built, and while not of modern fireproof construction they are all in a good state of repair and in nearly all cases are kept neat and clean. Each school has another fair-sized brick building used for general purposes, including training school. These buildings are all



in a very dilapidated condition, due in large part to the fact that the funds of the schools have not been sufficient for upkeep and repairs. In some cases the rooms present a very unkempt and untidy condition, which betokens an unpardonable weakness of administration.

The equipment in each of the schools is woefully inadequate. Nearly all the meager equipment at each of the schools was provided without any financial aid from the State, hence the greater obligation of the State to make more adequate provisions for these needs. The laboratories and libraries in some cases are hardly adequate for the needs of the smallest accredited high school in the State. The State should immediately establish funds for the upkeep and repair of buildings and for apparatus and libraries.

Grounds.—In all of the normal schools, excepting the one at Jacksonville, there is pressing need for additional land. These needs will be severally discussed in connection with each institution. It is imperative that steps be taken at once to secure the land needed before the inevitable advance in prices which is imminent. At least options should be secured looking to the future.

Inventory and costs.—Considering the relatively small amounts of money which the State has invested in the normal schools the returns in service have been very large indeed. In considering the returns which the State receives from its investment in teacher training it should not be forgotten that no institution renders a more valuable indirect return in home training. The great majority of normal students and graduates are young women whose normal lot after teaching a few years is to marry and rear families. No better preparation for the duties of the mother and home maker is given in any institution than in the normal school, where young women study child nature and receive training in the nurture, the instruction, and the development of the child. This indirect return to the State can not well be shown in graphs or statistics but it is invaluable.

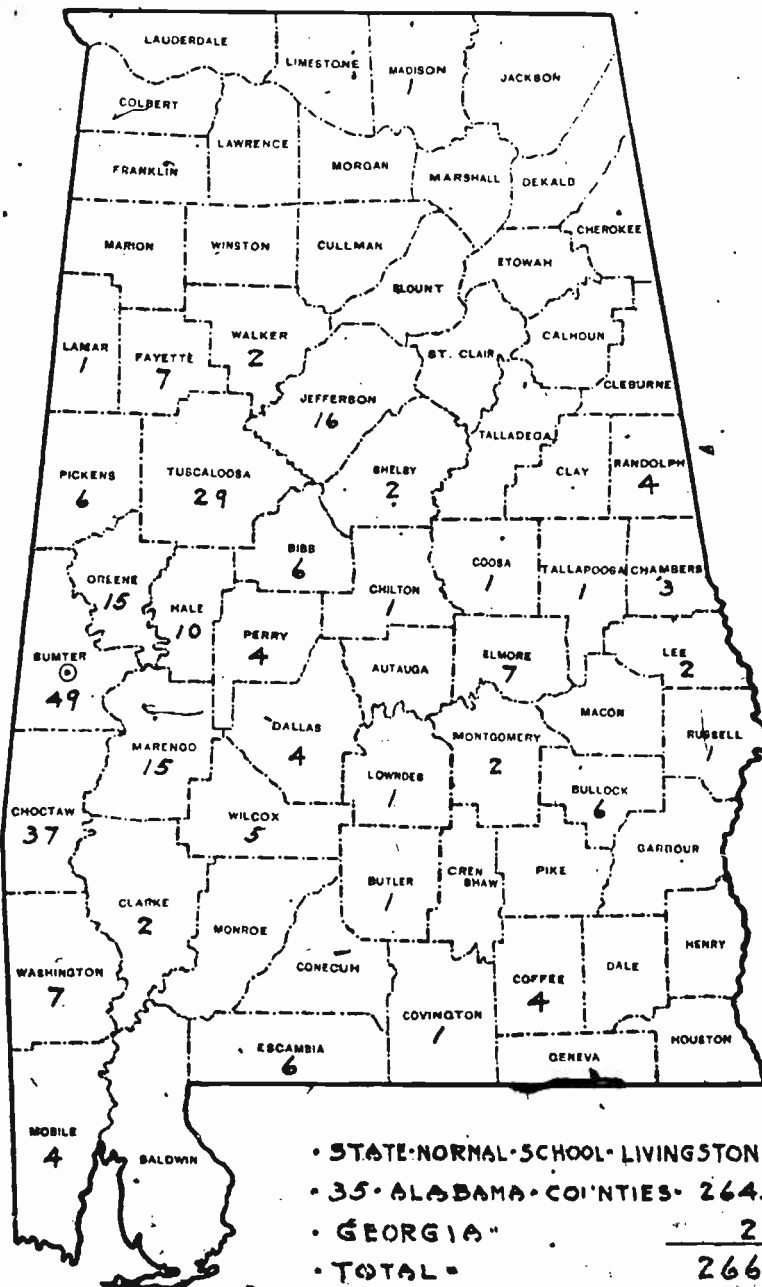
Inventory and budget.—Table 57 shows a summary of the inventory of capital outlay of each school and a summary of its budget for the fiscal year from July 1, 1917, to June 30, 1918.

(1) *Inventory:* This is designed to consist of an estimate of the fair cash value of the property of the school.

(2) *Income:* By this is meant all revenues, excepting from dormitories or boarding departments, which are to be considered as self-sustaining rather than revenue producing.

(3) *Expenditures:*

(a) *Capital outlay.* The expenditures in capital outlay should include all that are intended to enlarge the material equipment of the school or add to its efficiency in a relatively permanent way.



MAR 12.

- (1) Land and land improvements.
- (2) Buildings and betterments.
- (3) All kinds of new permanent equipment, such as machinery, fixtures, furniture, apparatus, tools, additions to the library and museum, but not ordinary repairs or replacements.

(b) The expenditures for maintenance should include all outlay intended to keep the plant up to 100 per cent of its former efficiency. Here belong all expenditures for repairs, replacements or equipment of every sort, insurance, and the service of watchman or others who would be employed even if the plant were not in use.

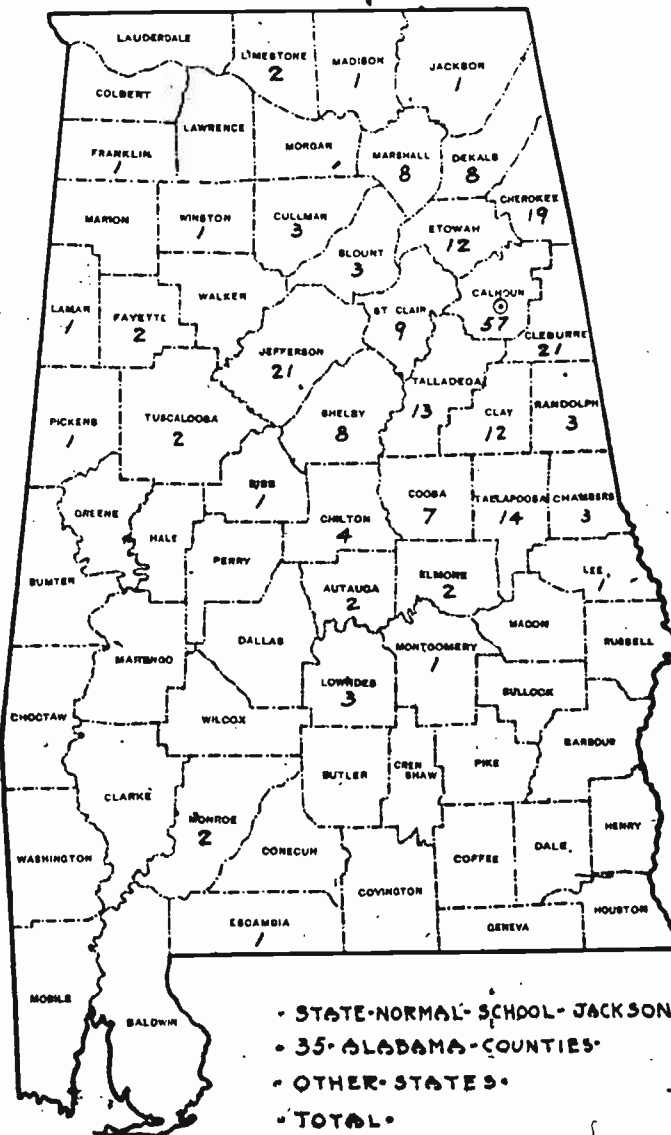
If the risk is carried by the State instead of by an insurance company, the cost of such insurance, according to current rates, should be charged to the maintenance account. Corresponding credit should be given receipts even though no actual outlay is made to the school.

(c) Operation. The cost of operation may be classified under the following heads:

- | | |
|---|---|
| <ul style="list-style-type: none"> (1) Administration: <ul style="list-style-type: none"> Salaries of officers and clerks. Printing, stationery, office supplies. Postage, telephone, and telegraph. Express, freight, and drayage. Traveling expenses. (2) Physical plant: <ul style="list-style-type: none"> Salaries of engineers, janitors, and yardmen. Fuel, oil, light and power, and water. Janitor's supplies. | <ul style="list-style-type: none"> (3) Instruction: <ul style="list-style-type: none"> Teachers' salaries. Textbooks. Light and power for instruction. Educational supplies. Librarians' salaries. Newspapers and magazines. Library supplies. (4) Student welfare: <ul style="list-style-type: none"> Student health. Lectures, concerts. Athletics. Student organizations. |
|---|---|

Students in the normal schools.—Data were obtained at regular chapel assemblies at the four class A normal schools from the students themselves. These are published in Table 58. In no case does this represent all of the students enrolled. In all of the schools, except Troy, some students were engaged in practice teaching at the time of the chapel assembly and in the case of Jacksonville attendance was optional. The data, however, may be considered fairly representative.

It will be noted that the farming population furnishes 68 per cent of the normal students. Nevertheless, only 27 per cent of the total expect to teach in rural schools as they now are conducted. It is very clearly not the fault of the normal school that so few of its students desire to teach in rural schools, as is shown by the fact that 68 per cent say they would make rural teaching their life work if living and teaching conditions in rural schools were satisfactory.



• STATE-NORMAL-SCHOOL-JACKSONVILLE-
 • 35-ALABAMA-COUNTIES- 250-
 • OTHER-STATES- 4-
 • TOTAL- 254-

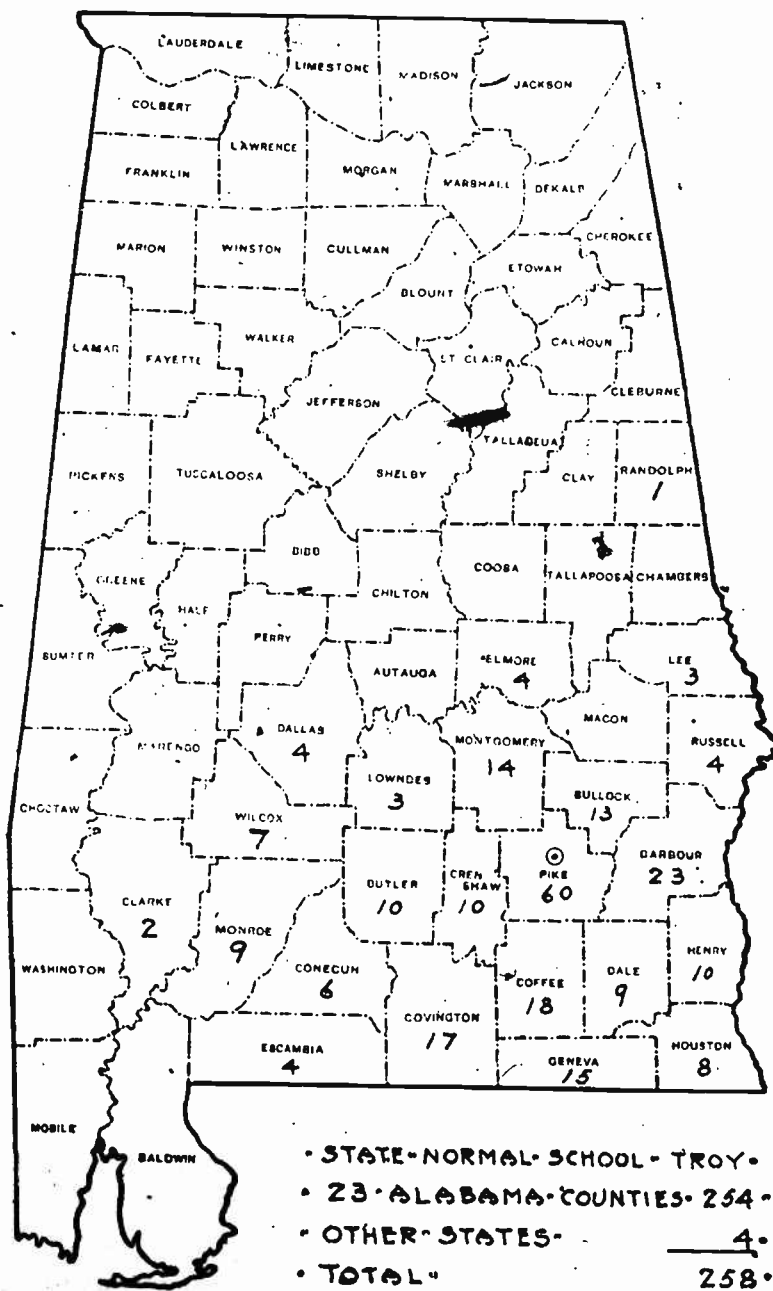
MAP 18.

TABLE 57.—Inventory and budget summary.

	Florence.	Jacksonville.	Livingston.	Troy.
1. Inventory of capital outlay:				
(a) Land and land improvements.....	\$20,000.00	\$15,000.00	\$10,000.00	\$19,000.00
(b) Buildings.....	160,000.00	125,000.00	105,000.00	100,000.00
(c) Machinery.....	950.00	2,000.00	2,000.00	400.00
(d) Fixtures.....	1,500.00	800.00	4,000.00	200.00
(e) Furniture and furnishings.....	24,000.00	10,000.00	7,000.00	2,500.00
(f) Apparatus.....	5,100.00	2,000.00	500.00	1,000.00
(g) Library.....	8,000.00	3,000.00	3,500.00	5,000.00
(h) Museum.....	1,500.00			
Total.....	221,050.00	157,600.00	132,000.00	128,100.00
Indebtedness.....	37,859.00	12,000.00	800.00	0
2. Income for fiscal year July 1, 1917, to June 30, 1918:				
(a) Appropriation.....	20,000.00	20,000.00	20,000.00	20,000.00
(b) Fees.....	8,537.00	6,115.49	9,447.00	11,435.87
Total.....	28,537.00	26,115.49	29,447.00	31,435.87
3. Expenditures for fiscal year 1917-18:				
(a) Capital outlay—				
(1) Land and land improvements.....	0	200.00	0	
(2) Buildings and building additions.....	0	1,000.00	367.00	
(3) Added permanent equipment.....	700.00	200.00	836.00	
(b) Maintenance.....	1,932.73	1,744.16		1,086.95
(c) Operation—				
(1) Administration.....	4,327.00	5,875.07	4,736.00	5,870.09
(2) Physical plant.....	2,050.49	1,808.91	2,526.00	1,939.50
(3) Instruction.....	18,527.27	20,102.20	19,985.00	19,803.00
(4) Student welfare.....	859.48	57.80		187.88
(5) "Other objects".....				1,382.56
Total.....	28,396.97	30,985.14	28,759.00	30,269.98

The 94.5 per cent of students who intend to teach is very gratifying, indeed. It amply demonstrates the fact that these schools are thoroughly devoted to the main purpose of their existence, namely, the training of teachers. Everything considered, the showing as to high-school preparation is also gratifying. The model preparation is shown to be four years of high-school work, the median preparation being 3.15 years. Many a normal school in States having better established high schools will not make a better showing. The relative maturity may be closely related to the general over-age condition found throughout the schools of the State, in spite of the fact that the elementary school is supposed to be completed in seven years.

Normal school faculties.—Data concerning the faculties of these schools show a relatively low standard of academic and professional training but a relatively long experience in teaching. Less than half the members of the faculties have completed college or university courses leading to academic or professional degrees. The foregoing statement applies to the faculties taken not only collectively, but also severally except for one school, but in this case the median attendance of faculty members beyond the seventh grade is but seven years, and several members possess degrees obtained from only four to six years of attendance beyond the seventh grade. In several of the schools a considerable number of the faculties have followed the



MAP 14.

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commendable practice of attending some of the best summer schools in the country. While this does not make a strong showing in point of time, it reveals a marked interest in professional advancement.

TABLE 58.—Data pertaining to students in normal schools.

	Florence.	Jacksonville.	Livingston.	Troy.	Total.
Birthplace:					
The farm.....	79	68	126	146	419
In town (less than 2,000).....	32	15	53	49	149
In city.....	22	7	11	5	45
Guardian's occupation:					
Farmer.....	69	54	126	141	390
Business.....	37	1	39	55	132
Professional.....	12	37	15	15	79
Artisan.....	12		8	4	24
Do you intend to teach?					
Yes.....	130	80	175	199	584
No.....	2	9	15	10	34
Intend to make teaching permanent occupation					
Yes.....	107	63	149	115	432
No.....	25	18	35	31	109
Where do you expect to teach?					
In country.....	37	23	47	100	213
In town.....	78	45	113	72	308
In city.....	18	11	14	13	56
Kind of teaching preferred:					
Rural (all grades).....	27	13	25	61	126
Elementary in town or city.....	40	24	66	64	197
Intermediate in town or city.....	31	25	35	36	127
High school.....	25	17	34	16	92
Supervisor.....	2	2	4	0	14
Vocational subjects.....	4	4	0	17	31
Desire to make rural teaching life work?					
Yes.....	25	15	40	76	156
No.....	102	63	144	136	305
Desire to make rural teaching lifework if living and teaching conditions satisfactory?					
Yes.....	80	49	117	145	391
No.....	38	28	62	60	188
Years beyond seventh grade when entering normal:					
None.....	9	6	9	4	28
1.....	30	18	32	31	111
2.....	21	19	57	53	150
3.....	15	10	47	49	121
4.....	50	29	32	60	171
5.....	7	3	4	8	22
6.....	1	4	4	2	11
Age at time of completing present course:					
Less than 15.....					
15.....	1		1		2
16.....	1	1		1	3
17.....	5	2	6	8	21
18.....	17	10	36	33	96
19.....	18	20	42	50	130
20.....	30	22	52	57	161
21.....	3	5	13	23	44
22.....	8	8	16	14	46
23.....	4	4	4	8	20
24.....	5	3	4	3	15
25.....	11	9	4	2	26
26.....	1	1	3	2	7
27.....	1		1	2	4
28.....	2	1	1	2	6
29.....	3	1	1		5
30.....	1	1	1		3
Over 30.....	3	1	2	1	7

A brief survey of the personnel of several of the faculties gives the impression that provision should at once be made for emeritus positions for those who have had long and honorable careers in the service of the State and who are now being subjected to the strain of overloaded programs. As a specific case in point one teacher who

has had 28 years' experience in public school teaching and 30 years' teaching in normal school is now carrying 16 teaching periods per week with a teaching load of 512 student clock hours. Surely no argument is necessary. A few thousand dollars per year would cover these needs and would be but a meager recognition of faithful services.

Teacher load.—An attempt was made to compute the teacher load in each of the faculties, but some difficulty was experienced in evaluating the time which departmental teachers devoted to supervising the teaching of their respective subjects in the training school. Even when giving this a very low estimate, it was found that the teacher load exceeds the standard generally accepted for normal schools.

Instructional costs.—An examination of the educational administration of any institution involves a study of the distribution of the work and of the funds apportioned to instruction. The distribution in the class A normal schools of Alabama is shown in terms of costs per 1,000 "student clock hours" and does not include training school costs.

By a student clock hour is meant a period of 50 minutes in the clear for one student. In a class of 30 students reciting 45 minutes there will be 27 student clock hours for each recitation $\frac{45}{50}$ of 30 = 27. A laboratory or shop hour is treated as representing two-thirds of a recitation hour.

In estimating the work of the teacher due allowance is made for distinctively administrative duties, but no allowance is made for many hours spent by faithful teachers in giving individual assistance to students, counseling with them regarding student organizations, and other school work not directly connected with classroom instruction.

TABLE 59.—Instructional costs, per 1,000 student hours.

Subject.	Florence.	Jacksonville	Livingston.	Troy.
Mathematics.....	\$77.00	\$80.00	\$86.00	\$104.00
Arts.....	30.00	80.00	75.00	77.00
English.....	70.00	110.00	72.00	75.00
Science.....	78.00	113.00	60.00	121.00
History.....	50.00	85.00	55.00	81.00
Education.....	50.00	40.00	54.00	86.00

As the attendance and budgets at the four class A normal schools do not vary greatly and the courses of study are identical, a comparison of unit costs may fairly be made. It will be noted from Table 59 that considerable variation occurs. The facts that education is the most important department in a normal school and that the instructional

cost in that department is one of the lowest in these lists suggest a careful study of the situation in each school. The explanation of the disparity of relative costs in the same school is found partly in the fact that elective academic subjects of college grade are not in great demand, the classes are small, and the unit costs are consequently high. It is partly found, however, in the fact that the classes in education are altogether too large, one school reporting the work of the head of that department as comprising the teaching of four classes having 108, 75, 70, and 70 students, respectively.

Space does not permit a discussion of methods of instruction, but it should be pointed out that modern pedagogy prescribes other forms of procedure than recitation lesson types. Although it is necessary for administrative purposes to continue much instructional work by means of formal recitations, the normal schools should lead not only in utilizing the various recitation types, but should also lead in the employment of organic, socialized processes. The latter forms of procedure require additions to equipment and teaching force in which the department of education may claim precedence over other departments in a normal school.

The relatively mature students who are studying the learning processes with a view of equipping themselves to direct these processes in the public schools should have every opportunity to study them under most favorable conditions. Since learning proceeds by trial and error, directed learning is necessarily a laboratory procedure, using the term laboratory in a broad sense. Any course in education, therefore, demands facilities for experimental studies, not necessarily expensive equipment, but rooms, materials, teachers, and helpers. To conduct a large class in a study of the technique of teaching by the textbook method is in the same pedagogical class with teaching chemistry or physics by the textbook method. It is far from being valueless but it is also far from being the best method.

From the fact that the unit costs for instruction in education are low it should not be inferred that the costs for academic subjects are too high. The latter costs are on a very low basis and it is to be hoped that the State will find means to enlarge and increase the efficiency of the departments of education without lowering the standards in any other departments, all of which seem to be at an irreducible minimum.

Occupation of the normal school graduates.—An important question is raised when we ask the occupation of the graduates of the normal schools. Data furnished for the classes of 1918 show that nearly all of these graduates at once engaged in teaching or entered into war or other Government services. This is certainly an excellent record.

TABLE 60.—Occupation of graduates, classes of 1918.

Occupation.	Florence.	Jacksonville.	Livingston.	Troy.	Total.
Teaching:					
(a) Rural.....	50	13	34	43	140
(b) Village.....	16	20	16	7	59
(c) City.....	26	2	4	12	44
2. Attending school.....	2		1		3
3. Home work.....					
4. Married.....	1		1	1	3
5. Enlisted in Army.....	3	5	4	6	18
6. Government service.....	3	3	2		8
7. Deceased.....				1	1
8. Unknown.....		5			5
Total.....	101	48	62	70	281

Their salaries.—An inspection of the salary lists shows that the members of the faculty are greatly underpaid. The recent advance in teachers' salaries has placed many high-school teachers in advance of the salaries of many of these trained and experienced teachers. When the great importance of their work is considered, and also the material advance in salary which would be required to replace many of them, it is readily seen that appreciable advances should be made at once. This applies with equal force to the salaries of the presidents of the schools.

The average salaries of faculty members, not including the presidents and a few student assistants and part-time teachers, are as follows for the regular school year of nine months: Florence, \$1,252; Livingston, \$1,021; Jacksonville, \$1,173; Troy, \$1,385.

Too much emphasis should not be placed upon a simple average of salaries, but the variation in any one school, everything considered, is not excessive. However, if compared with averages for other normal schools surveyed by the Bureau of Education, they prove to be very low, as appears in the following figures, which were all taken before the recent increase in salaries:

Ellensburg (Wash.).....	\$1,700	Flagstaff (Ariz.).....	\$1,555
Cheney (Wash.).....	1,695	Regina, Canada.....	1,915
Bellingham (Wash.).....	1,713	Saskatoon, Canada.....	2,380
Tempe (Ariz.).....	1,794		

Training school facilities.—The training school facilities at the four class A normal schools are quite similar and have similar merits and defects. The normal school at Florence is the only one which has anything approaching adequate training facilities. Even here, where a good near-by city school building of modern type supplements the locally maintained training school, this department is seriously handicapped for lack of a good training school building and a sufficient number of supervisors. The crying building need of each of the normal schools, after some plastering, kalsomining, painting, and repairs

have been made to the main building, is the erection of a good elementary school building. This would relieve the congestion now obtaining in all of the main buildings of these institutions and afford room for laboratories and many other purposes.

The prospective teacher should have an opportunity to participate in public school work which is carried on in a normal way. The teaching of small groups of from 3 to 10 children, the observation by student teachers of the teaching of other student teachers, the scrappy teaching of a single period per day by a student teacher, and the demonstration or illustrative lesson are all by no means to be underestimated. Directed teaching in a school which is conducted primarily for the training of the children who attend it and which is conducted in the normal fashion, in which the prospective teacher will actually be called upon to conduct one, is of inestimable value. To this end a normal school should be provided with means whereby its practice facilities may be enlarged to include student teacher service rendered to public schools in the city where the institution is located, in near-by towns and cities, and in rural schools, particularly in consolidated rural schools of the modern type.

A model consolidated rural school with a set of model buildings for home and farm should be provided for each of the normal schools. This would render a great service to the State in many ways, besides training rural teachers and inspiring teachers to take up rural teaching.

Sanitary conditions of the normal schools.—The location of each of the State normal schools of class A is satisfactory from the point of view of sanitation. Good water and sewer facilities are provided. Great improvements could be made in toilet facilities. Excepting in the ladies' dormitories an adequate number of lavatories with plenty of soap and towels were not available at any school. Children can not possibly be taught the most simple lessons of personal sanitation without these inexpensive facilities. A standard commonly accepted as good is one seat and one lavatory for every 15 girls and one seat and one urinal for every 25 boys, with a lavatory for every 15 boys. Although the walls and floors were in great need of repair not a case of obscene markings was observed.

Extension departments and bureaus of research.—The work of the normal school should not be limited to the training of prospective teachers. Teachers in service need much aid which teacher-training institutions should be equipped to give. This will be especially true if the State carries out the proposed plan of making professional training a prerequisite to certification. Many lines of extension service are carried on by teacher-training institutions and a great field awaits the normal schools of Alabama when means are placed at their disposal for fulfilling their complete function.

In recent years instrumentalities have been devised for evaluating educational achievements and methods of teaching. In the standard tests and measurements now available a teacher or supervisor has means for diagnosing educational situations and finding remedies for discovered defects. A great field of experimental education has been opened up and no teacher's professional preparation is complete without a knowledge of these instruments and the possession of skill in their uses. Normal schools which are not familiarizing their students with these experimental studies and helping them to acquire skill in using their results are failing in a very important function. The State, however, can not expect the teacher-training schools to make researches or render public service in these experimental and scientific ways without providing the necessary equipment and helpers. As the total expenses of such a bureau are relatively small and much of the statistical work will be gladly done by students in training, it is to be hoped that means may soon be provided by which the normal schools of Alabama may render valuable service to schools and teachers in making diagnoses for them and offering their services through these means.

The normal school at Florence.—The State normal school at Florence is the oldest in the State, having been founded in 1873. While its geographical location would appear from the map to be disadvantageous, the statistics of its attendance tell a very favorable story. This school is in great need of land. It has an excellent and comprehensive building plan, which, if carried out, and if adequate means be placed at its disposal, will make of this school one of the best of its kind, not only in the South, but in the entire country. Similar statements may be made concerning each of the other class A normal schools.

There are enough public-school children and schools in Florence and the neighboring city of Sheffield to furnish the best of practice facilities for a large teacher-training school. A splendid spirit of cooperation exists between the school and the community as evidenced by the facts that a large modern public school has recently been built near the normal-school campus and practice facilities are freely offered, under proper safeguards, for the normal school.

Among other evidences of cooperation between the school and the community are two well-built dormitories which the people of the city have erected for the use of students and teachers of the school.

The most urgent financial need of the school is an appropriation of \$10,000 for repairs, furniture, and equipment for the main building. Much new plastering is needed, some new floors and woodwork, considerable additions to the toilets and much painting and kalsomining. These statements apply with more or less force to the main buildings of each of the class A normal schools.

A good training school should be provided at once for reasons already given. A suitable building could be built and equipped for from \$40,000 to \$50,000. It is estimated that the land needs of the school could be met for \$80,000. Unhappily, this school is struggling under the handicap of an interest-bearing indebtedness of \$37,859. This should be promptly liquidated by the State as a matter of sound business management.

A model consolidated rural school with other suitable buildings should be provided.

A good gymnasium, a school hospital, and a president's home are greatly needed.

To advance the salaries even moderately, to employ some additional teachers, and to provide proper upkeep and repair of buildings an increase of at least \$10,000 should be made to the annual appropriations of this school.

The normal school at Jacksonville.—There is no pressing need for much additional land for this school, as the site is reasonably adequate and the school is fortunate in possessing a valuable farm. This farm is of great value in the demonstration of different farming methods and of various home, sanitation, and other rural conditions. It is also of economic value to the school in supplying products for the dormitory tables.

All that was said concerning the building needs of Florence applies with equal force to Jacksonville. No utilization of local public schools is made for practice teaching. Such arrangements are needed at the present time, and as the school grows larger student-teacher services should be rendered not only in the local schools but in neighboring cities. The establishment of a model consolidated rural school, as suggested for Florence, is needed here also. Some increases should at once be made in salaries and a few additional teachers employed.

The normal school at Livingston.—The visitor to this school is at once favorably impressed with the extreme neatness manifested throughout all of the buildings, and the shrewd business management shown in adding to the school's properties and in conserving its resources. The school possesses a number of wooden buildings which, while not adding to the attractiveness of the school plant nor lessening the fire hazard, nevertheless render a valuable service to the school. The grounds of the school need very appreciable enlargement, and considerable acreage should be added to the small farming property of the school.

The practice facilities at this school are more limited than those at the other class A normal schools. This, however, is owing entirely to the fact that the school is located in a small town. Excellent local cooperation exists, and the community has placed all of the public schools at the service of the normal school, as the school grows.

larger this limitation will be felt, but there are near-by villages and not distant cities where student-teacher service may be rendered which will prove mutually advantageous. The immediate handicap to the establishment of amicable and mutually advantageous cooperation of this kind is the lack of good roads in this vicinity. There is every reason to believe, however, that the good-roads movement will progress at a rate commensurate with the growth of the school. In the meantime the good train service existing may be taken advantage of in reaching these towns and cities. The development of good roads will also facilitate rural teacher-training plans which need to be worked out here as elsewhere.

All that has been said concerning building and budgetary needs at Florence apply to Livingston excepting that the main building seems to be in a slightly better state of repair.

The normal school at Troy.—This school suffers a severe handicap in its location in annoying proximity to a railroad over which many trains pass daily. The grounds are also greatly cramped. It is imperative that the campus be enlarged and plans be adopted for buildings to house the training school and most classes at places more remote from the din of railway traffic.

The main building is in a state of even greater dilapidation than any other normal buildings in the State. The State can ill afford to permit its public buildings to deteriorate to the condition of this building. An appropriation of \$15,000 should at once be made to put this building into suitable condition.

Summary of financial needs.—As the needs of the class A normal schools are very extensive and the legislature does not have the means at its disposal to supply all of these needs at once, the following program of appropriations is proposed for the following quadrennium:

TABLE 61.—Proposed program of appropriations.

	Florence.	Jacksonville.	Livingston.	Troy.
Appropriation for 1919-20:				
For operation.....	\$25,000	\$25,000	\$25,000	\$25,000
For maintenance.....	10,000	10,000	8,000	15,000
For capital outlay—				
Training school.....	40,000	40,000	40,000	40,000
Land.....	20,000	10,000	15,000	15,000
Indebtedness.....	38,000			
Appropriation for 1920-21:				
For operation.....	30,000	30,000	30,000	30,000
For maintenance.....	5,000	5,000	5,000	5,000
For capital outlay.....	15,000	15,000	15,000	15,000
Appropriation for 1921-22:				
For operation.....	40,000	40,000	40,000	40,000
For maintenance.....	8,000	8,000	8,000	8,000
For capital outlay.....	40,000	40,000	40,000	40,000
Appropriation for 1922-23:				
For operation.....	50,000	50,000	50,000	50,000
For maintenance.....	8,000	8,000	8,000	8,000
For capital outlay.....	25,000	25,000	25,000	25,000

While the training school as at present constituted is not adequate for the present needs of the school, there are public school facilities immediately available in the community, if mutually advantageous cooperative plans are adopted, to serve the needs of the school for some time to come. As is the case at the other normal schools, facilities for rural school training should be provided, and for this purpose the means at the disposal of the school should be increased. The general building and budgetary needs are very similar to those of the other class A normal schools.

Normal-school course of study.—The present courses of study for the class A normal schools have been worked out very carefully and follow generally accepted principles. Only a few suggestions occur to the committee as sufficiently important to be mentioned in this connection. In the four-year courses for those who enter with two years of high-school credit there are courses in solid geometry and trigonometry required of all students. This does not conform to the best practice in State normal schools, nor is it a requirement based upon modern conceptions of education and professional training. In place of these academic requirements it is suggested that the students be permitted to make elections. As the attendance increases and the faculty and facilities of the schools permit the offering of additional courses, it is suggested that they be grouped on the basis of the kind of teaching for which the student is training, such as rural schools, primary, kindergarten, intermediate grades, etc., rather than a grouping on an academic basis, such as scientific, mathematics, history, civics, etc.

When training for departmentalized teaching can be offered, differentiation in the way of academic electives or academic groupings might well be offered in a course for training departmental teachers. The present plan of combining courses on a basis of subject matter and on basis of teaching positions to be filled doubtless works out satisfactorily.

II. NORMAL SCHOOLS OF CLASS B.

Two normal schools are not accredited and are designated as class B normal schools. The State appropriates only \$5,000 annually for each of these schools and there are almost no other resources available for their maintenance and operation. With the stigma of being designated as nonaccredited second-class schools—for this is the practical effect of the classification—and the lack of means to carry out any attractive programs of work, these schools have most serious handicaps. These facts should be borne in mind by those who unjustly criticize the schools.

Normal school at Daphne.—This school is located on a most beautiful site overlooking Mobile Bay. There is probably no place in the

State having a more delightful climate. This fact is evidenced in the numbers of tourists who frequent this section from the North in winter and from the South in summer.

Theoretically, the location is ideal for a fifth State normal school. It is 135 miles by air line from Troy and 132 miles from Livingston. The school is easily reached from Mobile by a boat ride across the bay. As a matter of fact, however, so far as actual travel is concerned, it is located at a place little frequented, save by tourists, as is usual with places off the railroad and not along lines of commercial travel. The problem of adequate practice facilities, which is serious enough at some of the other normal schools, is almost an unsolvable one, as the community is very small.

By heroic efforts the management of the school has provided some practice facilities and some dormitory accommodations, and has made some needed improvements, and the school has had a better attendance and rendered a better service to the State than the State has any right to expect from its pitifully small financial support.

Normal school at Moundville.—This school is much less fortunate in its location than is Daphne. It is only 43 miles by air line from Livingston and only 14 miles from Tuscaloosa, the seat of the State university. The same statements which were made concerning the school at Daphne may be made regarding this school, so far as concerns practice facilities, the vigorous efforts of the management, and the service rendered to the State under such serious handicaps.

Specific recommendations relative to disposition of the class B normal schools.—The survey committee can find no possible alternative recommendations for these two schools than that they be converted at once into county high schools according to the terms of the present law. This will give them funds far more adequate for the purposes of a high school. If the State wishes to add more normal schools, they should be located at such strategic centers as Selma, Montgomery, or Birmingham. The wisdom of adding any more normal schools at the present time or in the near future is certainly very questionable.

III. COLORED NORMAL SCHOOLS.

The State has made provision for training colored teachers at the State Normal School at Montgomery, at Tuskegee Institute, and the Agricultural and Mechanical Arts College at Normal. In addition to these there are several private colored schools, such as Talladega College, Burrell Normal School, etc. Of these schools Talladega College is the only one that is accredited.

While it is commendable to hold the same standards for the colored as for whites, the survey committee is convinced that a larger recognition should be accorded these schools. Since none of the non-

accredited schools have courses extending beyond the eleventh grade, the same scholastic rating that is accorded the class A normal schools could not be granted; nor is it expected or desired by the management of these schools or by the colored people, who insist most logically and properly that no lower standards be set up for them than for the white people. On this principle all are agreed, and it should be applied as far as possible. However, because rating of these schools can not be granted on a par with class A normal schools until the school work measures up to the same standard, it does not follow that there is no middle ground. There would be no violation of the established principle or lowering of any standards of such schools if the State Normal School at Montgomery and Tuskegee Institute should be accredited and their graduates granted second-grade certificates. It is the recommendation of the committee that this action be taken at once. It would be a great encouragement to the young people who are planning to teach to attend these schools and to continue their attendance until they are graduated.

Normal school at Montgomery.—The State normal at Montgomery is fortunate in being located at the capital of the State. A better site might have been chosen, but with the addition of land recently acquired there is room for a very considerable growth. The school should have a farm both for the purpose of education and demonstration purposes and for food supplies for a boarding department.

As the city of Montgomery does not maintain a colored high school, the colored youth of the city who finish the seventh grade and who wish to continue their education attend this school. Criticism is occasionally heard because of the fact that the city takes advantage of the presence of this State institution to escape taxation for a colored high school. Whatever defects may exist in this regard should not in any way militate against the school. The fact is, that the majority of the students attending the school have a bona fide intention of teaching and the State becomes the beneficiary by reason of local attendance.

The fact that from the point of view of attendance the school is largely a local institution is not altogether due to the failure of the city to maintain a colored high school. The State has made no provision in the way of dormitories for housing out-of-town students. An appropriation for a suitable dormitory for young women should be made at once if the school is to remain in Montgomery.

The survey committee urgently recommends that adequate facilities for industrial and agricultural training be at once provided. The facilities at hand permit only a little elementary cabinetmaking and a limited amount of home economics and handicraft work. While this has its value it should be remembered that the school world has long since come to a reaching conception of education

through industrial and vocational preparation and functioning. If this kind of program is suitable for the white race, there can certainly be no arguments against its need for the colored race. Not only should these facilities be provided for the sake of the young people who attend the school, but even more so for the benefit of the children in the schools taught by the graduates and students of this normal school.

With a splendid institution like Tuskegee Institute only 40 miles away it might not be necessary for the State to build a great plant at or near Montgomery for teacher training. The broad and far-reaching conception of the imperative needs of the colored race of which Tuskegee is the exponent should be borne in mind in making provisions for other schools, and the method whereby better types of training can be brought about should not be so completely wanting at the State normal school at Montgomery by reason of lack of equipment and funds. The State of Alabama can make no better investment than in providing a suitable type of industrial teacher training for colored teachers. Had these paragraphs been presented without amendment and qualification a few years ago some criticisms would have been offered on the ground that they imply that the only educational needs of the colored race are physical and economic. Happily, no disputes now arise over the conception of the school in terms of linking up education with life, of motivating its processes by the solution of actual rather than artificial problems; in short, of conceiving education as cross-sectioning life rather than constituting a separate strand of it. It is with this view of education in mind that the committee conceives an adequate school equipment to include much more than rooms with seats to be used by students in classes which meet to recite from books.

The survey committee earnestly recommends that the appropriation for the maintenance and operation of this school be increased by 50 per cent as a minimum.

Tuskegee Normal and Industrial Institute.—This splendid institution is widely and favorably known throughout the educational world and the committee gladly confirms the excellent reports concerning it. The school is almost entirely maintained from endowment and other private funds, receiving only \$4,000 annually from the State.

That the State could wisely expend many times this sum in furthering teacher training at this school goes without saying. The committee gladly recommends that a substantial increase be made, but only on condition that its expenditure be under the direct supervision of the State. The committee has no criticism on the present management of the school as a private corporation under a self-perpetuating board; but as a principle of public policy it is not advisable for the

State to appropriate any considerable funds to such an institution without exercising a direct control over their expenditure. On the other hand it should be borne in mind that Tuskegee Institute is in a sense a national institution, has considerable endowments which are growing year by year and it may be seriously questioned whether the State could as well administer such an institution as is done under the present arrangements. A considerable appropriation by the State might have the unfortunate effect of cutting off larger benefactions from other sources. The complete control by the State might interfere with the prosecution of certain types of service to the colored race which transcend State bounds. The committee is in full accord with the ideals of the administration of the school and believes the legislature is like minded on this subject. It may well be that the best policy for the State to adopt is that which has been consistently followed of keeping its hands off the administration of the school, but of rendering such financial aid as will not in any way act as a deterrent to private contributions and of exercising only a nominal control over such expenditures. The committee believes that the present annual appropriation of \$4,500 might be doubled, but seriously questions the advisability of doing more at the present time.

The recommendations as to the accrediting of the school are again urged by the committee. This can have none other than a strengthening and promotive effect.

Summary of recommendations.—1. That professional training be required as a prerequisite to the issuance of teachers' certificates, the standard being gradually raised to avoid teacher shortage and protection being afforded experienced and skilled teachers now in service.

2. A requirement that members of boards of control of an institution be not residents of the county in which the institution is located.

3. That a pension and emeritus system be established for teachers.

4. That the program of appropriations recommended be adopted for buildings, repairs and equipment, and increases for maintenance and operation of State normal schools.

5. That minor changes be made in the courses of study as indicated.

6. That the class B normal schools be converted into county high schools.

7. The accrediting of the State normal school (colored) at Montgomery and Tuskegee Institute, the addition of a school farm, buildings and equipment for the former and increased appropriations for both.

Chapter XX.

HIGHER EDUCATION IN ALABAMA.

In Chapter I it was pointed out that Alabama is a State of immense latent resources. It belongs to the very small group of States that combine three wholly different varieties of natural wealth. It is a great agricultural State, with a wide range of soil and climate capable of growing agricultural products of the utmost diversity. It is a great mineral State. Its vast deposits of coal, iron, marble, graphite, and limestone give it potential rank among the foremost mineral producing States in the Union. Moreover, Alabama possesses an abundance of water power, so located, for the most part, as to be accessible for manufacturing, mining, and the operation of public utilities. This unusual conjunction of native resources is rounded out and made complete by a series of navigable rivers which tap both the agricultural and industrial areas and can, if utilized, carry the products of these areas either into the Ohio Basin or to the State's own important seaport on the Gulf.

And, yet, Alabama is poor. It is an almost incredible paradox, but nevertheless an undeniable fact. The State has not enough money to give its employees appropriate compensation or to support its institutions of public welfare, its public schools, and its agencies for higher education. The legislature has been liberal, especially to education. Within the limits of its ability it has made generous appropriations, especially to the higher educational institutions. On at least two occasions it has even appropriated more money than it had. But in spite of this the institutions have starved. They have starved in the midst of plenty, because the State is poor. Certain citizens of the State are rich. Citizens of other States are rich and growing richer from Alabama's wealth, but the State languishes and lags behind the rest of the Union for the want of a few million dollars a year.

The outside investigator confronting this curious paradox naturally seeks the reason. Why should a State with boundless resources, most of which are already being developed, be unable to finance those essential activities upon which its true prosperity depends? The reason lies clear to view. Only an insignificant fraction of the State's real wealth is taxed. The State levies what taxes it collects—

and the rate is not exorbitant—on a small percentage of the true value of property. There are no income taxes, no excess profits taxes, no inheritance taxes.

In Alabama the large individual property holder and the big industrial corporation find a sanctuary safe and secure. They enjoy a happy immunity from the distasteful obligation of contributing to the public welfare that reasonable proportion of their wealth which most other States demand. The smaller property holder appears to enjoy equal immunity. In any event, both large and small owners unite to preserve the status quo. Past attempts to alter the revenue system of the State have, with few exceptions, been defeated. There has been bred and fostered in the public mind a superstitious dread of taxation which permeates all parts of the body politic and is shared even by those who have nothing to tax. Thus, we have the extraordinary spectacle of a State that deliberately keeps itself in poverty in order that a few may reap rich profits; that neglects to develop that human material on which its very strength depends; that allows its mighty stores of natural wealth either to lie idle or to pass into the hands of outsiders and colonists.

These matters are discussed in detail later in the report. (See Chapter XXIII.) They are touched upon here because of their particular bearing on higher education. The State's agencies for higher education are not what they should be. They are not adequate to meet the State's urgent and immediate needs. In range of instruction and capacity to accommodate students they do not compare favorably with those of other States of similar population. Relatively they are not well equipped. Moreover, there are no strong private colleges or universities within the State to supplement the deficiencies of the public institutions. These facts will presently be shown in some detail. They are no secret, however. Nor do they constitute any reflection on the officers of the State's higher schools. In the face of almost unprecedented handicaps, at the cost of great personal sacrifices, the faculties of these institutions have succeeded in furnishing a sound and worthy training to those few who could resort to them, and in preserving in some measure the educational reputation of the State.

Alabama can repair the deficiencies in higher education in just one way, namely, through the reform of the system of taxation. Unless the recommendations made in Chapter XXIII are adopted, or unless by some other means substantially equal sums are secured for general appropriations, the State must continue to starve its higher institutions. It must reconcile itself to a position of educational inferiority. There is absolutely no other method of providing these institutions with the support which they need and which the State needs them to have. If the steps advised are not taken, the legislature may, to be sure, from time to time increase the appropriations to one

or all of the higher schools by slight amounts. For example, it may even find the money to meet their present very modest budgets. But this would be a palliative, not a remedy. It would not insure their continuous development in accordance with the demands of the State. The recommendation relating to the increase of taxation is therefore basic to this report. On its acceptance all others depend. Unless it is adopted, the survey, as far as it concerns the higher institutions, will have slight value, or none at all.

The committee is persuaded, however, that the recommendation will be adopted. It can conceive of no justification for the expenditure of the considerable sum of money the present investigation has cost, the summoning of numerous advisors from without the State, the large sacrifice of time and strength by a group of the State's most distinguished citizens, except that the State intends to abide by the conclusions. The people of Alabama are justly proud of their past. Their ancestors have made significant contributions to American history. Ever since its foundation the State has furnished some of the foremost leaders of the South and of the Nation. In the crisis through which the country has just passed Alabama has given a rare demonstration of patriotism. It has freely spent its treasure and the more precious lives of its sons in the national defense. It has a high and honorable record among the States. It now faces a more prosaic, and hence more difficult task. It must continue to make present financial sacrifice in order to meet its obligations to its future citizens and leaders. The committee is confident that the people of Alabama will respond with equal cheerfulness to this new appeal to their patriotism. On the strength of this confidence it offers the following analysis of the State's higher educational problems, with recommendations as to their solution.

Higher educational needs of Alabama and the relation of existing institutions to them.—The development of State higher institutions and the character of the instruction that they offer are conditioned by the social needs of the State in which they are located and by the facilities for secondary training which the State affords. Some State universities and colleges meet the State's needs for higher professional and general training adequately. Some, through lack of insight or lack of support, fail to do so. What are the real needs of Alabama in the field of higher education? The committee has found them singularly hard to determine. There are several reasons for the difficulty; namely (1) the fact that it is 10 years since census material was collected, and in the interval the State has undergone great economic changes; (2) the apparent failure of civic and professional bodies to study the question; and (3) the poverty-stricken condition of the university and the polytechnic institute which has prevented

them from making those inquiries into the needs of their constituencies which might suggest the desirability of costly expansions. But even without reliable statistical information, certain of the State's needs are obvious.

AGRICULTURE.

According to the last census approximately 82 per cent of Alabama's population lived in rural communities. There were over 20 million acres of land in farms and over 262 thousand farmers. The total value of crops was over 144 million dollars. The estimated value of the crop in 1918 was 358 million dollars. These figures are large absolutely, but small in relation to what they might be. But a fraction of Alabama's productive land is now under cultivation. Very little of that which is cultivated has been brought to its maximum productivity. Moreover, the State is ravaged by destructive pests which make constant inroads on its most valuable crops. It is clear that in addition to the need already discussed for agricultural instruction of secondary grade (see Chapter XI), the State's vital interests demand the maintenance of a strong agricultural college, with ample provision both for teaching and experimentation. Such a college should turn out hundreds of young men a year equipped with the most modern scientific knowledge, prepared to be the leaders in this the State's most important industry. It should be the center for research into all those problems of agricultural production which particularly affect Alabama.

Has the State such a college? The Alabama Polytechnic Institute, the State College of Agriculture and Mechanic Arts for whites, established in 1872, has maintained courses in agriculture for approximately 46 years. At the beginning of this period instruction in agriculture was not of college grade anywhere in the United States. The science of agriculture has been gradually developed by the agricultural colleges and experiment stations. The organization of it into genuine collegiate curricula has taken place within the past 20 years. For reasons which it is not pertinent here to discuss, the Alabama Polytechnic Institute was somewhat slower than its sister institutions in other sections of the country in placing its agricultural courses on a definite collegiate basis. Only within the past decade could these courses be rated as truly college courses. During the past 10 years the college has graduated 184 men whose present occupation is agriculture. If there be added to these the small number now engaged in teaching agriculture, the yearly average output of the institution is still less than 20. Veterinary medicine may be counted as allied to agriculture. If the 122 graduates in veterinary medicine during the past 10 years are included in the total number of college-trained men that this institution has turned into the agricultural industry in a decade, the annual average is but

slightly over 30.¹ Of the last two graduating classes, 44 and 45 men, respectively, received degrees in agriculture, and 23 and 17 in veterinary medicine. The total enrollment in agricultural curricula during the past academic year was 206. The college has also had, of course, a considerable number of students in these curricula who did not graduate.

Could the college care for more students in agriculture? Probably a few. It is patent that the emphasis has always been laid on training in the mechanic arts rather than on training in agriculture. This is due to a variety of reasons. For many years agriculture was regarded throughout the country as a less respectable and worthy calling. This attitude toward it still prevails in parts of the South, perhaps particularly in Alabama, although happily it has largely disappeared elsewhere. Colleges are in part products of their environments. But if they fulfill their true functions, they also mold their environments. They lead the minds of the people. They alter public opinion. They reveal to a community its potentialities and its obligations. The Alabama Polytechnic Institute can not escape a certain share of responsibility for the failure of the State to provide adequate training facilities for its principal industry. If the college had had the vision, undoubtedly the State would by now have caught a dim reflection of it.

* But omelets can not be made without eggs to break. A glance at the State's contributions for the support of the Alabama Polytechnic Institute shows how little the college could have done, no matter what its convictions and intentions. It also shows that the financial situation of the Alabama Polytechnic Institute is in one respect absolutely unique. The college has not received a dollar of direct appropriations solely for purposes of agricultural instruction. Every item of the State's appropriations is in compensation for services actually performed which furnish the State an immense monetary return. As a revelation of parsimony and short-sightedness this situation is impressive enough. But consider what it means in the management of an educational institution. A large proportion of the institution's departments have as their first obligation something other than instruction. The inspection and analysis of agricultural materials or products for the benefit of the State must be attended to before the college may proceed with its regular business. Teaching is reduced to the level of a by-product. The committee will shortly make specific recommendations covering the State's future policy in this matter. At this point it is sufficient to make note of the fact and of its bearing on the development of the State agricultural college.

¹ Many of these men are, of course, no longer residents of Alabama. State institutions always train many who practice their professions elsewhere. This wastage is to be counted on. The majority of graduates of the State institutions usually remain in the home State.

What about provisions for research and experimentation? Fortunately for Alabama the Federal Government supports by an annual appropriation of \$30,000 an experiment station in connection with each agricultural and mechanical college. In most States which are predominantly agricultural this basic sum is supplemented by large State appropriations. It has been frequently and abundantly demonstrated that for every dollar spent in agricultural research hundreds or thousands of dollars are returned to the State in increased production. Alabama, however, has been content to let the Federal Government fight the boll weevil and discover the proper types of crops for each of its many diversified regions largely unaided by State contributions. The State's appropriations for agricultural experimentation have been insignificant. In spite of the exceptional ability of the investigating staff of the Alabama Polytechnic Institute—ability which is recognized throughout the Nation—progress has been dishearteningly slow. Problems that are crying for solution must remain untouched from year to year for want of men and means to solve them.

Certain conclusions present themselves. Only a fraction of the State's needs in professional agricultural training and in agricultural research are now met. It would be absurd to consider a small increase in the size and scope of the agricultural college. If the college were trebled or quadrupled in size it would still fall far short of the service which the State absolutely requires. The State must enlarge its whole concept of higher agricultural training. It must put sums of money into the equipment and maintenance of this institution which by comparison will make its previous contributions look like the widow's mite. And it must see that they are spent for agricultural education and experimentation. The college, on the other hand, should revise its attitude toward agriculture. It should recognize that in the near future, if its true obligations are to be fulfilled, the supreme emphasis must be laid on training leaders in the field of scientific agricultural production and rural life.

ENGINEERING.

But the State of Alabama is experiencing that shifting of the center of gravity from the country to the city which has taken place all over the United States. The change has come late, but it promises to be rapid. Probably the next census will show an increase of at least 10 per cent in the urban population. The reason is the sudden development of mining and manufacturing. Already Alabama stands "third among the States in the production of iron and ore, fourth in the production of pig iron, sixth in the production of coal." The great Birmingham district is apparently just at the beginning of its growth. It requires no stretch of the imagination to picture it as one of the leading industrial centers of the country.

At the same time the rise of the shipbuilding industry and large port developments are taking place at Mobile. The sources of water power are being exploited and utilized in these centers and in building up the milling industry in places of lesser magnitude.

These facts point unmistakably to another great need in professional education. Alabama needs engineers. It will need ever greater numbers of engineers. Not only the industrial development just mentioned, but also the whole experience of the United States in the war combine to raise engineering to the first rank among the professions for which a State such as this must train men. Engineering science is apparently just on the eve of a tremendous development. New applications of it to the whole process of production are just about to be made. It is entering the field of industrial organization and even the field of business. The term engineering has already ceased to represent a narrow specialty or a combination of narrow specialties. Instead, it is coming to signify a method of handling the complex problems of production and human organization. This evolution has been greatly stimulated by the war. The war as a whole was a gigantic engineering undertaking. A large percentage of its component enterprises were engineering pure and simple. It furnished an impressive object lesson of the wide applicability of the engineering method. Not the least part of that lesson was the demonstration of the similarity of the factors which make for success in all operations involving the mastery of materials, whether in war or in peace. It is not surprising, therefore, that engineering has cast its spell over young men and that larger numbers than ever before are apparently going to seek this type of training, whatever their ultimate professional goals. That a State like Alabama in a time like that upon which the country is entering needs extensive agencies for engineering education is self-evident.

What agencies has it? There are two—the Alabama Polytechnic Institute, which is the State College of Agriculture and Mechanic Arts, and has cultivated engineering since its establishment in 1872, and the University of Alabama, which has offered engineering courses continuously since 1881. Such courses had, however, been offered sporadically since 1861. Of the graduates of the last 10 years the Alabama Polytechnic Institute reports 351 now engaged in engineering, the University of Alabama 52. The total enrollment in engineering curricula at the Alabama Polytechnic Institute for the last academic year was 386, at the University of Alabama 115. Both institutions, but particularly the Alabama Polytechnic Institute because of its larger numbers, have sent engineering graduates all over the country, many of whom occupy distinguished positions in the profession. Whether the numbers now in training in engineering at these two institutions are sufficient to meet the needs of the State—counting on the emigration to other States of a certain considerable percentage—the committee is unable to say. To determine this ques-

tion with any degree of accuracy would necessitate a long investigation, for which the committee had neither the time nor the facilities. If it might judge by the casual testimony it received—and there was a good deal of it—the Birmingham district alone could absorb, and is eager to absorb, a much larger number than is annually available. The committee concludes, therefore, in spite of the fact that the State maintains two engineering schools, it is not oversupplying its present needs and must greatly increase the output of engineers before it can meet its future needs.

TABLE 62.—Enrollments in engineering at the University of Alabama and the Alabama Polytechnic Institute for the 20-year period from 1899-1918.

Year	First degrees conferred.		Graduate students.		Seniors.		Juniors.	
	Univ. of Ala.	Ala. Pol. Inst.	Univ. of Ala.	Ala. Pol. Inst.	Univ. of Ala.	Ala. Pol. Inst.	Univ. of Ala.	Ala. Pol. Inst.
1898-99	1	14	1	5	1	16	6	25
1899-1900	4	20	1	4	7	21	6	35
1900-1901	3	30	3	1	4	34	1	32
1901-2	0	26	4	3	0	28	4	33
1902-3	4	24	0	5	4	25	4	48
1903-4	3	31	3	5	5	38	9	59
1904-5	2	41	2	9	4	50	2	52
1905-6	4	38	6	14	1	42	4	62
1906-7	2	45	3	5	0	59	3	57
1907-8	7	58	0	3	0	55	7	75
1908-9	7	51	0	17	3	65	10	60
1909-10	3	54	0	8	4	71	6	73
1910-11	8	55	3	6	15	67	9	70
1911-12	2	53	6	9	6	61	5	90
1912-13	4	40	2	9	5	71	12	77
1913-14	6	46	2	6	8	64	15	89
1914-15	5	41	4	14	9	65	22	82
1915-16	8	58	1	17	13	70	11	59
1916-17	5	52	4	7	6	50	14	61
1917-18	2	43	0	4	6	49	43	69
Total	78	820	45	151	101	1,001	163	1,228
Yearly average	3.9	41.0	2.2	7.6	5.0	50.0	8.1	61.4

Year	Sophomores.		Freshmen.		Specials.		Total enrollment.	
	Univ. of Ala.	Ala. Pol. Inst.	Univ. of Ala.	Ala. Pol. Inst.	Univ. of Ala.	Ala. Pol. Inst.	Univ. of Ala.	Ala. Pol. Inst.
1898-99	0	40	9	42	0	6	8	134
1899-1900	0	35	0	61	0	9	14	135
1900-1901	0	41	0	50	0	10	8	168
1901-2	0	57	0	52	0	12	8	185
1902-3	0	45	0	57	1	8	9	188
1903-4	0	62	0	72	5	18	22	249
1904-5	8	67	6	79	0	11	22	268
1905-6	3	83	16	96	2	17	32	304
1906-7	8	74	16	91	5	15	35	289
1907-8	14	79	25	78	3	11	49	301
1908-9	9	94	22	70	4	16	48	342
1909-10	13	84	19	72	9	19	81	339
1910-11	9	97	24	65	8	11	66	306
1911-12	16	94	22	76	19	9	74	339
1912-13	18	97	38	72	9	7	84	333
1913-14	29	102	35	76	5	7	94	345
1914-15	24	68	36	96	4	6	90	330
1915-16	33	67	28	145	2	11	99	360
1916-17	29	102	48	159	2	24	108	405
1917-18	41	94	55	145	0	15	115	386
Total	254	1,440	400	1,645	79	237	1,043	4,731
Yearly average	12.7	72.0	20.0	82.2	3.9	11.9	52.1	236.6

But with this conclusion the problem of the State's policy with reference to engineering education is by no means settled. Only a single superficial aspect of it is touched upon. The most serious phase of the problem lies in the existence of two State-supported engineering schools. The existence of two schools means division of the State's effort, with a consequent loss—temporarily, at least—of efficiency. It means rivalry before the legislature for appropriations, competition for students, expensive duplication of high-class men and equipment, institutional jealousy and misunderstanding, and all the wretched chapter of discord which is the present lot of nearly every State where similar conditions prevail. Escape from these evils seems well-nigh impossible as long as the two schools have approximately equal support or may pretend to approximately equal standing. At any rate, no State which divides its engineering effort has been able altogether to escape them. The only clean-cut solution appears to be the abandonment of engineering at one institution and the concentration of it at the other. In two of the five cases where the Bureau of Education has been called upon to arbitrate this question it has suggested this solution. It may be noted that the officers and partisans of the Alabama Polytechnic Institute would favor this solution in Alabama provided, of course, that engineering were concentrated at the institute; and that the officers and partisans of the University of Alabama would be equally ready for it, provided engineering were concentrated at the university. Probably all would agree that if the State gave no engineering education and were to establish it now for the first time it had better be centered in one institution.

Is such concentration now possible or desirable? The committee believes not. The bases of its belief are worth setting forth. The reasons for not concentrating all engineering education at the Alabama Polytechnic Institute are (1) the disastrous effect which this step would probably have upon the development of the university and (2) the unfavorable location of the Alabama Polytechnic Institute for certain types of engineering instruction. The reasons for not concentrating all engineering education at the university are (1) the fact that engineering is closely allied to modern agriculture and that adequate instruction in the latter field is impossible without some facilities for training in certain of the engineering branches; (2) the traditional position of engineering as a coordinate part of the work of land-grant colleges; and (3) the admirable record of the Alabama Polytechnic Institute as a training school for engineers. Several of these reasons should be discussed in greater detail.

The University of Alabama, more than many State universities, needs applied science. The committee is very little impressed by the argument frequently presented to it, that if engineering were re-

moved from the university the prestige of the institution would be lowered and in consequence of this humiliation its morale undermined. There is no personal or institutional rebuke involved in readjustments of the State's educational system which are advantageous to the State. It is for a wholly different reason that the University of Alabama needs engineering. The might of tradition is the strongest influence in the life of an old institution. Tradition is unquestionably a most precious possession, but there are attendant dangers. The force of institutional tradition is generally against innovation. It would preserve unaltered the standards and practices of the past. It is blind to the new demands of a changed social environment, which must be met by other educational methods. Now the peculiar obligation of a State university is the obligation to keep constantly abreast of the social needs of the State; constantly to adapt the training it purveys to those needs; to be the interpreter of both the present and the future as well as of the past. Privately supported institutions may stand pat if they choose, and if they dare. A State university must ever be moving on, ever changing ground. The set of tradition at the University of Alabama, as at many old institutions North and South, is, unless the committee has been misled, in the direction of a literary and bookish training. The university has consequently had to combat a sentiment in the State that it is devoted to the interests of a limited class, and that it is remote from the life of the people. Engineering is the most vital bond with the life of the State. Both for the sake of its contacts with the State and for the sake of its own inner balance, it is therefore essential that the university conduct courses in the applications of science.

The second reason for the retention of engineering instruction at the university is the location of that institution. It is on the edge of the great mining and industrial district and relatively close to river-development projects and to sources of water power. Short of location in the immediate neighborhood of Birmingham itself, the university could scarcely be better situated for conducting engineering education. If the industrial area grows as is anticipated, it will inevitably become a center of higher technical training. It is appropriate that a State institution should become the chief agency for such training. The university is already in the field and may properly be that agency. Auburn, on the other hand, is remote from any industrial community. Its immediate environs offer no opportunities for engineering students either to observe or to participate in engineering practice except as it applies to agriculture. Engineering instruction is coming to be associated more and more with actual engineering operations. Factories, shops, and mines are coming to be for the engineering student what hospital clinics are for the medical student. A medical school can not exist without clinics. The com-

mittee ventures to predict that before long engineering schools will find industrial clinics as nearly indispensable to their existence. In its laboratories an engineering school is of course able to produce the essential conditions of scientific practice necessary to reinforce theoretical instruction. But it is the supplementing of the laboratory by the shop that is on the eve of general adoption. Incidentally this tendency will relieve engineering schools of a great burden of expense. The engineering school therefore which is located within an industrial district has the keys to the future.

To remove engineering instruction from a land-grant college is legally possible. The courts have several times affirmed the legal right of the State to redistribute the land-grant fund at its pleasure. It is, however, a practical impossibility to remove engineering from any well established land-grant college. Again the force of tradition comes into play. Sixty years of possession of the engineering field have given the land-grant colleges what is regarded as a vested right to engineering training. All efforts of their opponents to prove that Congress in 1862 did not intend to include engineering by the term "mechanic arts" have failed to shake their position. And it is fortunate for the country that this has been the case. The contribution of the land-grant colleges to the development of engineering education has been of inestimable value. But even if it were practicable to remove engineering from the Alabama Polytechnic Institute, it would, in the committee's judgment, be unwise. The interrelations of agriculture and engineering are growing constantly closer. The single land-grant institution which was established solely as an agricultural college has recently been obliged to introduce certain courses in engineering. If the forecast of the coming development of engineering science made at the beginning of this section is correct, engineering can no more be dissociated from agriculture in the future than from any other productive industry.

A contributory factor, although not by itself a determinative one, is the extraordinary line of distinguished engineers that have received their professional education at the Alabama Polytechnic Institute. It would violate the sense of fitness of every unprejudiced person in the State if an institution with such a record were to be shorn of its principal activity for the sake of promoting regularity in the State scheme of higher education.

Is the result then a complete *impasse*? If the officers of the two institutions will resolutely face the facts and will consent to treat the problem of engineering training as a State problem in which the institutions are but instruments and not the principal beneficiaries, a reasonable solution is possible. That the question has not been approached in this way is indicated by the present organization of the

work of engineering instruction. The catalogues of the two institutions announce the following degree curricula in engineering:

Alabama Polytechnic Institute:

Civil engineering.
Electrical engineering.
Mechanical engineering.
Chemical engineering.
Mining engineering.
Architectural engineering.
Chemistry and metallurgy.

University of Alabama:

Civil and highway engineering.
Electrical engineering.
Mechanical engineering.
Chemical engineering.
Mining engineering.

In addition the Alabama Polytechnic Institute gives two-year courses in electricity, mining, and architecture and one-year courses in road construction and wireless telegraphy. The University of Alabama offers two-year technical courses designed to fit men for various vocations in the general field of engineering.

The most obvious characteristic of these offerings is their similarity. Duplication is as complete as possible, taking into account the fact that one institution offers only five degree curricula, while the other offers seven. A certain amount of duplication is inevitable if there are to be two schools of engineering. Duplication in engineering education is expensive and it entails other undesirable consequences. But the committee has already registered the opinion that it is less undesirable in Alabama than the concentration of engineering at one institution, which would put an end to it for all time.

Granting this, it is clear that the area of duplication should be reduced as much as possible. The experts in engineering education that the committee has consulted agree that some work in the four basic branches of engineering science, namely, civil, electrical, mechanical, and chemical engineering, should be carried forward in any institution which grants engineering degrees. Radical differentiation of the work of the Alabama institutions in these fields would probably not be feasible, at least in the immediate future. The committee conceives such differentiation to be possible within limits, however, as time goes on. For example, it may turn out that one institution is better equipped and better located to give thorough work in mechanical engineering than the other, and that therefore students desiring to fit themselves as mechanical engineers should be referred to it. But for the present duplication in these four branches must be accepted as one of the burdens the State must carry for having failed earlier in its history to organize its program of higher training more wisely.

The Bureau of Education's investigations in other States show that there is no more expensive form of duplication—unless it be in medical education—than duplication in mining engineering. The

cost per student clock hour of instruction in mining engineering is generally nearly double that in any other engineering department. Duplication is also wholly unnecessary. There is no State that needs two schools of mining engineering. No mining school in the country has a large enrollment. There are, indeed, probably more mining schools in the United States than are likely to be needed for many years to produce an adequate supply of mining engineers. That Alabama with its meager funds for higher education should attempt to maintain two full-fledged degree-granting departments of mining engineering is a manifest absurdity, which is rendered still more patent by a consideration of the enrollments at the two institutions. Neither has ever enrolled more than a handful in this branch. In the last academic year the Alabama Polytechnic Institute reported six students in mining engineering, the university none. Here is one place where concentration can be effected with obvious benefit to the State.

The committee recommends that henceforth instruction in mining engineering be conducted at the university alone and that with it be associated the degree curricula in chemistry and metallurgy which the demands of the State warrant. It bases its recommendation on two grounds: The first is the location of the university in the mining district. The second is its slightly superior equipment for this work. In spite of the fact that the university has been less successful in the past in attracting mining students, the committee is convinced that the logic of the situation irresistibly designates it as the place where the State should center its effort in mining education.

Whether the State is justified in maintaining degree curricula in architecture and architectural engineering the committee is unable to say. It notes that this work and the plans for its development at the Alabama Polytechnic Institute are unanimously indorsed by the Alabama chapter of the American Institute of Architects. It records its doubts, however, and suggests that before any considerable effort in this direction is undertaken the needs of the State for architects and architectural engineers be studied by the State council of education, and weighed against the needs in other fields of engineering.

The baleful effects of unregulated institutional competition on the development of a wise and far-sighted State policy in professional training are strikingly exemplified in the present situation of these two engineering colleges. The field of engineering as defined by the State's productive industries is little more than half occupied by both together, but it appears to the outside observer that neither has had sufficient power of detachment from the absorbing preoccupations of institutional rivalry to explore it with a view to efficient State service. There are at least four lines of engineering which the com-

mittee believes are essential to the future development of industrial production and which demand the attention of Alabama institutions if the latter are to fulfill their obligations to the State's productive interests. They are (1) agricultural engineering, (2) sanitary engineering, (3) textile engineering, and (4) industrial and commercial engineering. The committee is persuaded that investigation will show a well-defined need for intelligent leadership and training in all these lines.

The general outlines of a program for the future conduct of these two engineering institutions, a program which will not, to be sure, end unnecessary duplication at once but which will lead gradually to a definite differentiation, may easily be sketched. The first feature of it concerns intention and emphasis. The university should make the service of the mining and industrial district in which it is located its guide in the field of engineering education. (a) It should emphasize mining engineering and those other phases of engineering education which are contributory to it and which grow out of it. (b) It should develop hydraulic engineering and should serve as the State's principal agency for the solution of problems connected with the exploitation of water-power and for the training of experts in this field. (c) The university should develop as its means permit those newer applications of engineering science to industrial organization and management which have been referred to and which the Birmingham district demands. (d) It should apply itself also to the large scientific and economic problems connected with sanitation and to the training of sanitary engineers.

The field is large enough to tax the resources of an institution 10 times as well supported as the university. To cover a small segment of it thoroughly and effectively would be vastly more creditable than to stake off the whole area and to leave part of it unworked. If the objection should be raised that a fractional enterprise in engineering education is unworthy the attention of a first-class institution, the example of Stevens Institute of Technology may be cited, which devotes itself to a single engineering specialty and has won international distinction. A reorientation in its point of view toward engineering education is what the university needs. If the controlling factor in its program were the service of the State in this group of engineering enterprises and not the traditional conception of an orthodox engineering school, it would be in a position to make a far-reaching contribution to the development of the State and also to work out a valuable and distinctive effort in engineering education; one, moreover, that would probably not be duplicated by any other institution.

The application of the same principle and point of view to engineering at the Alabama Polytechnic Institute would result likewise

in a general differentiation of its effort from that of the university. The Alabama Polytechnic Institute is, or should be, the State's chief agency for intelligent leadership in the organization and regeneration of the agricultural, textile, and highway interests of the State. The committee suggests that it make these obligations its guide. If its future policy in the organization of engineering training were shaped primarily by the demands of the State for highway construction, for increased agricultural, lumber, and live-stock production, and for the development of mill towns and the milling industry, it too would be able to make a unique contribution both to the State's industrial output and to its own educational strength.

Of course the success of such a program as has been outlined would depend in the first place upon a careful and impartial study of the State's needs in the field of engineering education, and in the second place upon a genuine effort by the two institutions to cooperate in meeting these needs. The first requisite will be provided for if the State accepts the committee's recommendations for a State Council of Education. The second can not be secured by legislative action, or indeed by exhortation. It may be furthered by the work of the State Council of Education, which will tend to emphasize the unity of the State's effort in higher education and the subordination of the interests of any institution to the interests of that effort as a whole. But the substitution of a spirit of cooperation for a spirit of competition and antagonism entails a rebirth. The issue is of importance. The State is justified in using any means however drastic to bring it to pass.

Before leaving this aspect of the subject there are a few ghosts that should be laid. Much time and effort have been spent by each institution in attempts to prove priority in the engineering field, and thus to shift to the other the burden of the sin of duplication. The question is as indefinitely debatable as the question of Hamlet's sanity—and the settlement of it just about as important. It has no bearing whatever on present and future policies, which must be determined solely on the basis of the State's advantage.

The doctrine has been assiduously fostered in certain quarters that there is an essential distinction between the engineering training offered by the university and that provided by the Alabama Polytechnic Institute. According to this doctrine the university is the home of professional engineering, whereas the Alabama Polytechnic Institute gives a kind of denatured trade training which masquerades in the garments of engineering education. As far as the committee can discover the only basis of fact for this rumor lies in the past elasticity of the entrance standards of the Alabama Polytechnic Institute. The committee will have something to say about these later. Here it desires merely to note that they seem of recent years to have had

little effect upon the quality of the engineering curricula. These are standard in scope. On the other hand, the long list of prominent engineering alumni indicates that the authorities of the Alabama Polytechnic Institute have been unusually successful, in spite of the remoteness of the college from centers of production, in making the work in engineering vital and practical. The Alabama Polytechnic Institute has served the engineering needs of the State with conspicuous success.

The university's past achievements in this line are far less impressive. In spite of large equipment it has graduated an average of less than four engineers a year, and never more than eight. That is a very small output to offset the cost of this division of the university. (See Table 62.) The intimate relationships of the institution with the Birmingham district are made much of by the university officers. Thus far, however, these relationships have not been realized in practice. The committee was amazed that an institution so situated had made so little actual use of its extraordinary advantages. It has done little to develop the modern form of engineering education, which depends upon the establishment of close contacts with the industries, and involves the interplay of school and shop. The university, however, needs engineering as a means of binding its activities to the life of the State. If it grasps this conception and its implications, it can still render important service in this field.

The development of a genuinely effective State program of engineering education comes back finally to the question of support. The amounts appropriated to the Alabama Polytechnic Institute in the last decade are all in payment of services rendered, largely in the agricultural field. Out of them and the small Federal appropriations the institute has had to carry on its whole teaching effort. The State has made no specific appropriations for engineering education, except the small appropriations for buildings. The Alabama Polytechnic Institute is badly handicapped for equipment and has not space enough. It is inconceivable that it can much longer be expected to do creditable work in the engineering field without large additions to its resources. The present budget does not approximately cover its needs. The university, since the large appropriations which were used for an engineering building in 1907, has had no direct grants for engineering education. The engineering college has been supported out of the income from its endowment funds. That this has been sufficient to carry the college thus far is due to the small enrollment. If the State means to put the training for this, its second most important profession, on a firm foundation, it will have to adopt a far more liberal policy toward both institutions than it has ever practiced in the past.

TEACHER TRAINING.

*The State of Alabama has 158 high schools for whites, employing approximately 500 teachers. The turnover in the teaching profession is rapid. There are annually about 200 vacancies to be filled in the field of high-school teaching and administration for the white race alone. In no other profession is it possible to determine so accurately the number of practitioners needed. The determination in the case of teaching is reduced to a mathematical certainty, although the committee has been unable to assemble the exact figures. Knowledge of the kind of professional equipment which high-school teachers should have is almost as definite. Courses for the preparation of high-school teachers and administrators are well developed all over the United States. There is general agreement as to the indispensable requirements in the way of preparation and experience which should be demanded of high-school teachers in order to secure a well-served State system of high schools. The fundamental requirements are (1) graduation from a standard college, (2) study in the field of education and psychology in a collegiate institution, (3) experience in actual teaching or in practice teaching, and (4) special familiarity with the subjects to be taught. These represent minimum requirements, which are likely to be advanced as time goes on.

It is probably unnecessary to argue the importance to the State of adequate provision to meet these easily demonstrable needs. Without strong high schools the whole educational system of the State breaks down. Not only are the children who can avail themselves of secondary education defrauded of their right to educational advancement, but a gap is created between the common schools and the higher institutions. The popular method of bridging the gap is for the colleges to move down to the high-school level. When they do so the prospect of genuine professional training is lost. The colleges become hybrid institutions, neither secondary nor higher. Alabama has had experience enough with this condition to realize its seriousness. Its high-school system is largely a product of the last decade and a half. Before its existence the colleges were obliged to maintain preparatory departments, their standards of college training were low, and their graduates were not accepted as of equal rank with those of institutions in other parts of the country. The establishment of high schools throughout the State, the strengthening of their work, and the raising of the majority of the colleges to a collegiate level are largely the result of stimulus applied by the University of Alabama. Through the activities of the university's professors of secondary education and as a result of the university's leadership in the formation of the Association of Alabama Colleges,

the high schools have been born and nursed, colleges have been led into paths of academic righteousness, and the foundations have been laid for a State system of secondary and higher education which is in accord with the demands of the times.

But it is necessary to build still further upon these foundations. The mere existence of high schools is not sufficient without properly qualified teachers to serve them. The State must maintain adequate agencies for training high-school teachers. What are the existing agencies? How far do they go toward supplying the annual vacancies in the teaching staffs of the high schools?

The school of education of the University of Alabama, the school of agricultural education of the Alabama Polytechnic Institute, and the Alabama Girls' Technical Institute are the regularly constituted agencies for the training of high-school teachers. In the last academic year the university school of education sent into the teaching profession approximately 30, the school of agricultural education of the Alabama Polytechnic Institute 10, the Alabama Girls' Technical Institute 61, about half of whom entered the field of elementary education. The output of the last year was everywhere affected by the war. The total enrollment in education curricula is therefore more significant of the scope of these institutions as teacher-training agencies. The university enrolled 188, the Alabama Polytechnic Institute 49 in education curricula in 1917-18. The Alabama Girls' Technical Institute reports 116 of the present enrollment as intending to teach. Of these, but 56 expect to enter the high-school field. In addition, a small number of the graduates of private colleges in the State engage in high-school teaching. A liberal estimate of the possible product of all of these sources indicates that the State can count on recruiting from the teacher-training agencies within its borders approximately 80 high-school teachers a year.

The discrepancy between 80 and 200, the number of high-school teachers needed annually, must be met somehow. How? In many other States where there are shortages of home-trained teachers the deficits are largely made good by employing teachers from other States. With rare exceptions this source of supply is practically closed to Alabama. The State pays such low salaries that it can not attract teachers from other communities. Since the schools must run, the remedy which has been perforce adopted is the employment of improperly prepared teachers—graduates of the State normal schools and teachers from the elementary ranks who have had no college training. The schools suffer.

In order to rescue itself from this situation the committee judges that the State must take three steps: (1) It must increase the salaries of high-school teachers. This will be necessary both to induce Ala-

bama students to enter the teaching profession and to supply the State's deficiencies from other sources. (2) It must insist upon adequate professional preparation before it grants even a temporary license to high-school teachers. (3) It must strengthen its training agencies.

The necessity for a general large increase of salaries has already been argued. The State has also already taken the first steps toward the establishment of proper standards for high-school teachers' licenses. It has wisely defined by statute the function of the normal schools as being the preparation of elementary teachers. The blurring of the line of demarcation between the normal schools and the high schools, common in many States, is thus here happily avoided. Through the action of the State high-school commission the State has established college graduation as a prerequisite for the first-grade certificate. Up to the present, however, it has not made due provision for the support of the recognized training agencies for high-school teachers. In the following paragraphs the present scope and future necessities of these agencies are discussed.

The school of education of the University of Alabama.—This division of the university is served by four professors of education. It shares the services of those members of the general university faculty whose departments lie within the range of subjects ordinarily taught by high schools. Only one of the four professors of education is supported wholly by the State. Of the others, one is paid by the General Education Board, one by the income from the Peabody fund, and one in part by the Federal funds for vocational education and in part by the State appropriations required to match these funds. The work of the professor supported by the General Education Board is largely in the field of high-school inspection. It represents a contribution made to the State department of education and the other colleges of the State quite as much as to the university. It relieves the State department of the burden of high-school inspection. But a fraction of this professor's time is devoted to instruction.¹ The employment of a professor from the income of the Peabody fund is a temporary arrangement allowed by the trustees of the fund until such time as the educational building for which the fund was given may be needed. This time is already in sight. The professor of vocational education must devote himself exclusively to the training of teachers in trades and industries. His energies can not be diverted to the general preparation of high-school teachers.

The committee has indicated that one of the indispensable requirements for properly trained high-school teachers is actual teaching

¹ For recommendations covering the future administration of high-school inspection, see Chapters IV and XI.

experience, or experience in practice teaching. Since possession of the former is largely a matter of accident, it follows that every well-organized institution for the preparation of teachers must have facilities for practice teaching. These may be provided either in a practice school, under the direction of the training institution, or through the services of the students as practice teachers in regular public schools. Institutions located in or near large cities may profitably secure practice-teaching facilities by cooperative arrangement with the public-school authorities. Otherwise the practice school is a necessity. The University of Alabama has no practice-teaching facilities at present. The committee understands that arrangements are on the point of completion which will enable it to use the Tuscaloosa high school for this purpose. The committee doubts, however, whether the privileges of the local public school will in the near future be sufficient for the university's needs.

The school of education of the university should be in a position to turn from 100 to 150 graduates into the field of high-school teaching annually, if it is to fulfill its part of the great task of providing the State with the well-trained secondary school staff which it needs. The State should therefore place the school on a more substantial footing without delay. It should make adequate appropriations for a sufficient faculty. It should release the income of the Peabody fund and supplement it to provide a building. It should establish a practice school under the control of the university.

The committee assumes that the preparation of vocational teachers in trades and industries, now partially subsidized by Smith-Hughes funds, will continue to be done at the University of Alabama.

The school of agricultural education of the Alabama Polytechnic Institute.—The effort of the Alabama Polytechnic Institute in the field of teacher-training has of late been limited to the preparation of teachers of agriculture. The work is now in part subsidized by Federal funds for vocational education. The committee commends the wisdom of this limitation. The State has made extensive provision for agricultural instruction in the public schools. In consequence there is a large demand for teachers of agriculture. If the Alabama Polytechnic Institute is enabled to occupy this field fully, it will render its most appropriate contribution in the preparation of teachers. The committee has examined and in general indorses the plans of the school for the development of broader courses in agriculture and country life as preparation for rural leaders. Like the school of education of the university, however, the school of agricultural education needs facilities for practice teaching. The committee judges that in view of the peculiar purposes of the school it is preferable to arrange for these in connection with the work of rural high schools. The beginnings of these contacts have already been made. Such arrange-

ments have entailed considerable supervision and provisions for travel. The State should recognize these needs by suitable appropriations.

The committee is unable to see the necessity or the desirability of a separate inspection of high schools by the Alabama Polytechnic Institute. The existence up to the present year of this enterprise it regards as a sheer waste of time and money. The undertaking also has the added disadvantage of emphasizing the competition between the institute and the university.¹

Summer schools.—Both the university and the Alabama Polytechnic Institute maintain summer schools primarily for the benefit of teachers. The university receives \$5,000 a year for the support of its summer school, the Alabama Polytechnic Institute nothing. The advantages of summer schools as instruments for the professional preparation and advancement of the teaching body have already been discussed. (See Chapter XIX.) It is here sufficient to note that in the summer schools of these two institutions there appears the single inconsistency in the organization of the State's system of teacher training. The summer schools of both the university and the Alabama Polytechnic Institute cater largely to elementary teachers. Almost an even half of the students at the last session of the university summer school were not of college rank. The majority of these were elementary school teachers. A similar situation has prevailed at the Alabama Polytechnic Institute. The committee is elsewhere recommending the strengthening of the summer schools maintained in connection with the normal schools. It judges that when the normal schools are in a position to accommodate the elementary school teachers the university and the Alabama Polytechnic Institute should limit enrollment in their summer schools to teachers above elementary-school grade, and to college students. This is not likely to be possible, however, in the near future.

One of the principal advantages offered by summer schools in other States is the opportunity to hear and come in contact with the leaders in the profession. Universities and State colleges make special efforts to engage as instructors for periods of from one to six weeks the men and women who have achieved a national reputation in their respective fields. Owing to the inadequacy of their support, the Alabama summer schools have been able to follow this practice only to a very slight extent. Unless the grant to the university summer school were at least doubled, and unless the Alabama Polytechnic Institute were supplied with equal resources, the committee can not see how their offerings can be expected to compare favorably with those of the summer schools of other State institutions.

¹ For the committee's recommendations on high-school inspection, see Chapters IV and XI.

The Alabama Girls' Technical Institute.—The preparation of high-school teachers is a by-product of the work of the Alabama Girls' Technical Institute. As a result of the extraordinarily effective training in home economics offered by this institution, its graduates have been in increasing demand as teachers and supervisors of this subject. Incidentally they have taught other subjects in the school curriculum. The Alabama Girls' Technical Institute does not, however, and in the committee's opinion should not in the future, devote any very large part of its resources to the specific task of training high-school teachers. It has a distinctive function to fulfill in the State's scheme of higher education. What the committee conceives this function to be is discussed later. The committee favors the continued recognition of the institute's graduates in home economics and also in music and commercial branches by the appointing authorities as candidates for high-school positions in this subject.

MEDICINE.

That a State containing approximately 2 per cent of the total population of the United States, a State, moreover, with peculiarly complex problems in the domain of sanitation and public health, needs medical service is axiomatic. Does the obligation rest upon the State to supply its own needs by the maintenance of professional training agencies? A categorical answer to this question can not perhaps be given. But it should be noted that the united effort of the medical profession—probably the best organized of all professions and the one which has devoted most attention to the raising of professional standards—has been toward the development of medical education on national rather than on State lines. The conditions requisite for medical education in the modern sense can not be met everywhere. Modern medical education, especially in the clinical years, can be carried on successfully only in large centers of population. It always demands costly equipment. It is the most expensive type of professional training. While no populous State therefore may neglect provision for an adequate supply of medical service, it is quite possible that its needs may, and should be, met without the maintenance of a four-year medical school. Indeed, if the maintenance of such a school would interfere with the support of other kinds of training that must be furnished by the State, it is clear that the claims of the medical school are of secondary importance. There exist numerous well equipped and generously endowed schools in various parts of the country which are judged to be able to supply the national needs in medical education for some years to come.¹

¹ The committee points out that it might be much cheaper for a State to support students of medicine in existing schools outside its borders than to maintain its own medical institution. This is unquestionably the present situation in Alabama. The unit costs at the University of Alabama Medical School bear out this statement.

The problem of medical education in Alabama has been a vexed one for some years. The committee has devoted to its solution a disproportionate part of the time allowed it for the whole investigation. Finally, at the urgent suggestion of persons both inside and outside the University of Alabama, it sought expert medical advice. The committee invited one of the leading authorities on medical education, Lieut. Col. Horace D. Arnold, of the office of the Surgeon General, formerly dean of the graduate school of medicine of Harvard University and former chairman of the Council on Medical Education of the American Medical Association, to render an opinion. The opinion, in which the committee wholly concurs, is submitted herewith:

"The object of the educational survey is to present facts as they are and to advise a sound educational policy adapted to relatively limited financial resources. The consideration of personal feelings or local pride should not weigh in such judgment.

"A short statement in regard to standards in medical education will be pertinent. The Council on Medical Education of the American Medical Association is the recognized standardizing agency and authority for medical schools in America. Schools are classed as A, B, or C. Class A, the highest group, is a broad one, including not only those which closely approach the ideal in medical education, but all those whose graduates, in the opinion of the council, should be admitted to examination for licensure in medicine before the State boards of medicine. A bare inclusion above the lower line of class A can not be regarded as a satisfactory position by any institution that wishes to maintain high educational standards, and should not be satisfactory to any State university.

"Education in medicine is not a necessary part of a State educational system, nor is a medical department an essential part of a university. If a State, through its State university, undertakes to train men to become physicians, its chief object is presumably to furnish well-trained physicians for its citizens. It should not be satisfied with anything less than a broad, thorough training, which will not only enable them to be satisfactory practitioners according to present standards, but will enable them to keep up with the advance in medical science throughout their professional careers, so as to bring the advantages of such advance to the people of the State. Nothing less than the most thorough training to-day will fulfill this requirement.

"It should be the duty of the State to protect its citizens, through the licensure of physicians, from incompetent practitioners. But the protection at present afforded by State examining boards in medicine is in general inadequate—and Alabama is no exception to this general rule. Therefore the success of graduates of a school in passing State

boards is not in itself a safe basis on which to estimate the excellence of a school in matters of education. It is but one of a number of points that must be considered. The reports for the year 1918 show that of 13 graduates from the school of medicine of the University of Alabama examined by State boards during the year only one failed to pass, and he was graduated more than five years ago. The importance of this apparently favorable showing is lessened by the fact that 11 of the 12 who passed were examined by the State board of Alabama, and the other in Mississippi. There comes about a natural adjustment in the matter of examinations on the part of a State board and a medical school in the same State, which lessens the value of favorable statistics of graduates of a medical school before the home board of the school. I do not imply any collusion, or improper favoritism, but a favorable standing before the home State board is so common a phenomenon as to be discounted as a test of educational excellence.

"Up to the present time this school has been placed in class A by the Council on Medical Education. While this standing is more creditable than a lower rating, it should not be accepted as evidence of the attainment of a satisfactory educational standard. It should be remembered that the council has graded medical schools with great leniency in an effort to retain and to encourage all those schools which seemed capable of development to reach the desired standard. Educational conditions a few years ago were such as to justify special leniency in judging medical schools in the South, and those schools which were affiliated with universities gave the best promise for advancement and therefore justified liberal consideration. It was only on this basis that the medical school at Mobile was given a rating in class A and was retained in this class. Conditions have now changed. The weaker schools have now been given a sufficient time for development; it is time for the council to reinspect and to reclassify medical schools. The council will not be justified in extending the same leniency as in the former classification, and I believe that it will feel obliged to adopt a standard for class A that would leave out the medical department of the University of Alabama as it stands to-day.

"As a member of the Council on Medical Education, I participated in an inspection of this school January 13, 1914. The report noted that many improvements had recently been made in the institution, but added: "Nevertheless, this is another instance where so much was needed that much still remains to be done. It is to be hoped that the energy which has been shown in the improvements already brought about will not lag until the weaknesses still apparent are offset." The continuance of the school at that time in class A was based rather on this hope than on a cold judgment of the conditions.

My present inspection was on April 21, 1919. While it is true that some improvements have been made in the interval of five years, they have not been sufficient to essentially change the previous situation. In the meantime progressive schools with sufficient means have forged ahead, and it is my opinion that this school holds a relatively weaker position to-day than it did in 1914. Furthermore, the outlook is just so much worse, because the school has been given this opportunity to get in line with present-day requirements and has failed to make good. The council would have no justification now for leniency in judgment on the basis of expected improvement, as was the case five years ago. In making this statement I am making due allowance for the effects of the war as an explanation of present conditions.

"It is not my purpose to make a detailed report of the deficiencies, as would be done in an inspection by the council for the purpose of classification, but rather to treat the subject on broad lines. Why has the school failed to make the progress hoped for five years ago? I think there are two main reasons—lack of sufficient financial support, and the lack on the part of the authorities of the school of a sufficient understanding of what an up-to-date medical school should be.

"The report of the council in 1914 stated:

Above all, the college needs more money. It should have available \$40,000 or \$50,000 per year, in addition to students' fees. This is needed for the satisfactory maintenance of the school and should be in addition to any sums expended for added buildings or equipment. The sums mentioned, meanwhile, only refer to what is very essential at the present time. Within the next five or six years it is very probable that to keep up with the progress being made in other institutions a still larger annual income should be provided.

"I believe that this financial estimate at that time was a very conservative one; that it covered only the most essential points that needed improvement; and that it represented the minimum amount on which the school could hope to make anything approaching to satisfactory improvement. One of the chief reasons for the lack of progress lies in the fact that for this period the total receipts from State, county, and city have averaged well under \$20,000 annually, and that part of these funds had to be devoted to repairs, development, and equipment not contemplated in the above estimates.

"Physically speaking, the school has housing accommodations that could satisfactorily accommodate 100 students. Its equipment, however, is inadequate for 50 students. Its clinical facilities, if properly developed, would be barely satisfactory for 50 students, and there is no good prospect of satisfactory clinical opportunities for a larger number of students.

"Even more serious, in my opinion, than the lack of financial resources and physical equipment, and the limitation of clinical oppor-

tunities, is the lack of appreciation on the part of the school authorities of what modern medical education should be. I say this regretfully—with a full appreciation of the genuine devotion and loyalty of these men to the school and the personal sacrifices made by many in its behalf. Their fundamental conception, however, is too near to that of the old-time medical school—modified to some extent by the published requirements of the council but lacking in the spirit of modern medical teaching, which alone can put life into the physical framework. It is clear that the authorities have tried, with the limited means at command, to meet the advanced requirements as stated on paper.

"This point may be illustrated by the requirement for "all-time" teachers. The authorities have secured some "all-time" teachers, and it is their wish to secure the number required by the council. But an "all-time" teacher is not merely one who does not give his time to other outside work, and the title and an adequate salary do not constitute an "all-time" teacher in the sense meant by the council. To fulfill the function of such a position satisfactorily, he must have equipment, assistants, and financial provision that will enable him, in addition to his teaching, to carry on research, investigation, and self-improvement that will keep him abreast of his branch of medical science, and be an inspiration to himself and to his students. One of the disheartening things about this school is the absence of evidence of such activity—partly, to be sure, because of limited means, but partly, I think, due to the lack of appreciation of how essential such work is in modern medical education.

"I have stated that the clinical facilities might be considered adequate for the present number of students if properly utilized. By this I mean that there is a sufficient number of beds for this purpose in the city hospital, if they are ordinarily well filled with a variety of cases. But the system of records and the study of cases are not satisfactory for a modern teaching hospital. I do not mean that the hospital care and professional treatment of patients may not be as good as in the average hospital of this kind, but the proper training of medical students requires much more careful study of cases than that. The absence of up-to-date methods in this respect at the hospital, yet the great satisfaction felt by the school authorities with the existing clinical opportunities, again illustrates what I mean by their lack of appreciation of the needs of modern medical education. The same thing is shown in the entirely inadequate estimates made in the proposed budget for the maintenance of the school laboratories and for the teaching at the hospital.

"The deficiencies of the school will not be remedied merely by making larger appropriations. It is my opinion that the amount of money necessary to develop a first-class medical school at Mobile is

far greater than has been estimated; that the expenditure of that amount for this purpose is not justified in the present, or immediately expected, financial position of the State of Alabama; and that the attempt to build up this school to a satisfactory position should be abandoned.

"Under the circumstances it would seem wiser for the University of Alabama to abandon the attempt to conduct a four-year medical school, and to confine its efforts in undergraduate medical education for the present to the development of a really first-class medical school which gives the training of the first two years of the medical course. Such a plan has already been adopted in a number of States, as the best contribution that the State university can make under present conditions for medical education. A notable example of the successful development of this plan is the medical department of the University of Wisconsin. This plan could be satisfactorily carried out at the university at Tuscaloosa, and there are obvious advantages in undertaking this work there instead of at Mobile.

"If now or later the State of Alabama can devote additional funds beyond the needs of such a medical school for the medical benefit of its citizens, the medical plant at Mobile might well be utilized for the instruction and further training of the physicians of the State. The demonstration of the need of such postgraduate training for the average physician in practice is one of the lessons of the war, and may well receive serious consideration by the authorities of the State.

"My study of the conditions of medical education in Alabama included also an examination of the situation at Birmingham. This at present much larger center of population, with its manufacturing industries, its present hospital and medical school buildings, and the opportunities for further development, offers attractive possibilities. However, the outlay for the development of a satisfactory medical school at Birmingham is greater than the university or the State should at present undertake. The university is wise in retaining its control of the situation through its plan for postgraduate teaching, and this may well be developed through financial support from the State, as suggested above for the utilization of the medical plant at Mobile. There are obvious advantages in having two such centers in the State for the convenience of the medical profession, and the outlay for the establishment of useful courses of instruction for practitioners is relatively small—far less than that necessary for the systematic instruction of undergraduates.

"In my opinion the wisest plan for medical training by the State of Alabama would be the abandonment of undergraduate medical teaching at Mobile; the establishment of a two-year medical school at the State University at Tuscaloosa; the continuance of postgraduate medical teaching at Birmingham; and the establishment of a similar

center for postgraduate medical teaching at Mobile. Both of these postgraduate centers should be under full control of the University of Alabama. Later—probably some years later—if the finances of the State or of the university warrant it, the reestablishment of a four-year course in medicine may be considered. The clinical opportunities at Tuscaloosa would be insufficient for this purpose, and the new school would naturally be located either at Mobile or at Birmingham. The choice of location may well be left to be decided later. The choice should take into account the size of these centers of population as they then exist, the hospital and other clinical opportunities that are developed, and the success in teaching shown in the meantime at each of the two centers for postgraduate teaching.

"So far I have considered this matter solely from the educational point of view. There is, however, a serious legal difficulty, which will prevent the immediate adoption of this plan unless the statutes are changed. On February 15, 1915, an act was approved to amend section 1889 of the code of Alabama as follows:

Be it enacted by the legislature of Alabama:

SECTION 1. That section 1889 of the code be amended so as to read as follows:

"SEC. 1889. Medical department of the University of Alabama: The corporation styled the Medical College of Alabama is dissolved, and the institution heretofore known as the Medical College of Alabama is constituted the medical department of the University of Alabama, and shall hereafter be under the sole management, ownership, and control of the board of trustees of the University of Alabama, provided that the said medical department shall remain at Mobile so long as it can be maintained in that city as a class A school of medicine as defined by the Council on Medical Education of the American Medical Association. Whenever the Council on Medical Education of the American Medical Association informs the trustees of the university that it proposes to lower the classification of said medical department, said trustees shall order the removal of the said medical department to Tuscaloosa or elsewhere that may offer the best advantages and inducements, to be conducted in such manner as the trustees of the University of Alabama may elect, provided that the courses offered shall conform to recognized standards. All appropriations of moneys which have heretofore been made to said college (or department) or which may hereafter be made in aid of said medical department of the University of Alabama shall be paid to the trustees of the University of Alabama, to be used in such manner as they may from time to time direct."

SEC. 2. That all laws and parts of laws in conflict with the provisions of this act be and the same hereby are repealed.

"It would appear from this act that the University of Alabama is bound to maintain its medical department at Mobile "so long as it can be maintained in that city as a class A school of medicine as defined by the Council on Medical Education of the American Medical Association," and that it can not forthwith abandon the medical school at Mobile even if it wished to do so. Under these conditions I would recommend that the legislature make as liberal an appropriation as it can for medical education; that the university expend

this money this year chiefly in strengthening the first two years of the medical school at Mobile, by securing a sufficient number of competent "all-time" teachers, increasing the equipment of the laboratories, and making provision for research in the laboratory subjects; and that it request the Council on Medical Education of the American Medical Association to make an inspection of the school in the fall, as early as practicable after the session opens, and to report to the trustees of the university its decision as to the classification of the school. If the school is then rated in class A, the university would be justified educationally—as well as compelled legally—to continue the development of the medical school at Mobile.

"Incidentally it would in that case be shown that my estimate and forecast of the situation was too low. Perhaps it is wise that the school should thus be given the benefit of any doubt in this matter. If the school should fail to receive a rating in class A, then the plan suggested above could be carried out. In that case there would have been very little waste of money, since it would have been spent chiefly for equipment and personnel which could be transported to Tuscaloosa. The determination of the classification of the school early in the fall would enable the university to complete plans for the transfer of the two lower classes to Tuscaloosa at the beginning of the second semester, if the school failed to maintain its standing in class A.

"A few other details should receive consideration. Students entering the school this fall should be informed of the possibility of the change to a two-year basis, and the university should not obligate itself to furnish these students more than two years of medical instruction. A legal opinion should be obtained as to the obligation of the university to complete the four-year course in the case of the students who are already enrolled in the school. The plans for continuing clinical undergraduate teaching at Mobile after the next school year would depend upon this decision. The university should at least continue through the next school year at Mobile the clinical teaching for students of the two upper classes.

"It may be well to make it clear that I am making this report merely as an authority on medical education, and entirely independently from the Council on Medical Education of the American Medical Association. I resigned from the council last fall, because of my duties in military service, in directing matters relating to medical education at the Surgeon General's Office. It follows that I shall have no voice in the decision of the council as to the next classification of this medical school, and the Council on Medical Education may be relied upon to make its decision as to the rating of the school.

in a fair and unprejudiced manner. The council also is bound in no way by my recommendations, as I have come to my conclusions without consultation with the council."

PHARMACY.

If the committee's recommendations made in the preceding section are adopted, it is understood that the course in pharmacy maintained in connection with the medical school at Mobile will be abandoned. There is duplication in the field of pharmaceutical education which the committee judges to be unnecessary. Although apparently no effort has been made by either the university or the Alabama Polytechnic Institute to ascertain definitely the number of trained pharmacists needed in the State, the combined enrollments in pharmacy at the two institutions do not now and never have amounted to more than can easily be accommodated in a single department. The present enrollment at the medical school is 6, at the Alabama Polytechnic Institute 44.

There are obvious reasons why instruction in pharmacy may well be associated with instruction in medicine. The desirability of this association is the only justification for the maintenance of pharmacy as an offshoot of the university's effort in medical education. On the other hand, the basic sources in medical science with which the work in pharmacy is primarily related are given in connection with veterinary medicine at the Alabama Polytechnic Institute. Moreover, the department of pharmacy at the institute is much stronger than that at the medical school. It is a member of the American Conference of Pharmaceutical Faculties. It offers the three recognized curricula in pharmacy, namely, the two-year curriculum open to two-year high-school students and leading to the degree of Ph. G., a three-year curriculum leading to the degree of Ph. C., and a four-year curriculum leading to the degree of B. S. in pharmacy, admission to the last two curricula being based on 14 high-school units. The university, on the other hand, offers but a single subcollegiate two-year curriculum leading to the degree of Ph. G. All of these facts reinforce the committee's decision that the State's effort in pharmaceutical education should in the immediate future be centered at the Alabama Polytechnic Institute.

VETERINARY MEDICINE.

The need for a much larger number of trained veterinarians in the United States was demonstrated clearly during the World War. For a time those concerned with the national aspects of the care and production of live stock were alarmed by the dangers latent in the shortage of veterinary service. Facilities for education in

veterinary medicine, like those for education in human medicine, have developed independently of State lines. The field of veterinary medicine, however, is less well supplied. Indeed, the science of veterinary medicine is just beginning to receive due recognition. The Department of Agriculture has recently attempted to further this movement by defining, in cooperation with veterinary colleges, standards of education in veterinary medicine and by preparing a list of accredited veterinary colleges. The college of veterinary medicine of the Alabama Polytechnic Institute is listed by the department in class A. The committee is of the opinion that the continuance of this division of the institute, with such increases and support as are necessary, is a self-evident obligation for the State. (The most immediate necessity is in the direction of physical equipment.) Not only does the college of veterinary medicine serve one of the State's own major interests, but it exercises a general leadership in this field throughout a large part of the South.

LAW.

The practice of the law has always made a potent appeal to brilliant young men throughout the South and indeed throughout the Nation. The profession has been perhaps especially popular in Alabama. It offers attractive opportunities for a dignified career and for large influence in public life. Indeed, there is probably no other profession in which the rewards for talent and enterprise are so conspicuous under the present form of social organization. The law will probably continue to attract a considerable percentage of young men of ambition and initiative. The profession touches the corporate life of the State more closely than any other. Lawyers constitute a dominant proportion of the State's governing bodies and of its various administrative boards. Whether this should be the case or not, the fact remains. There is no indication that it will be altered in the near future. It is of supreme interest to the State that its laws should be well made and wisely interpreted and administered. The quality of the legal profession is therefore a matter of intimate concern to the State as a corporate entity and to every one of its citizens. The State can determine what the quality of the profession shall be. By its requirements for admission to the bar and by the agencies for legal education that it supports, it has complete control of the professional supply.

The committee is informed—although it has had no opportunities to verify the information—that the State bar requirements are not rigid enough to exclude from practice men with insufficient training, and that consequently the State is overstocked with lawyers of inferior education. If these statements are correct, there was in the

past a certain measure of justification for the conditions they reveal. In the days of political and industrial individualism it was important that there should be many starters in the race for professional leadership. The strain of competition inevitably eliminated the weaklings and the unfit. The State as a regulatory and directive agency entered relatively little into the life of the average citizen. Whether for weal or woe, that time has now gone. A new type of social organization has developed. Every year sees an enlargement of the State's participation in the business, the education, the health, and the conduct of its citizens. The primary instruments of its participation are its laws. The provision that the State makes for the forging and wielding of these instruments is a public interest second to none other.

The State maintains a law school at the University of Alabama. It would be more correct to say, "allows to exist," rather than maintains. The law school maintains itself. It lives off its fees. Its present condition is not one in which the State can take pride, although it can not escape responsibility. There are law schools connected with 35 State universities. Thirty-one of these require three years of study for the LL. B. degree. The university law schools of North Carolina, South Carolina, Mississippi, and Alabama require but two years. Graduates of the Alabama law school, however, are admitted without examination to the Alabama bar. Standardization of law schools has not proceeded very far, but a beginning has been made by the Association of American Law Schools. This association recognizes only those schools requiring three years of instruction for graduation and having a law library of at least 5,000 volumes. These are minimum and admittedly temporary requirements. They by no means represent what are commonly regarded as the desirable prerequisites for institutions that give training in so influential a profession. Indeed, several law schools admit only college graduates; others require at least one year of collegiate study for entrance. The University of Alabama law school does not meet either of the two minimum requirements of the Association of American Law Schools.

There is no excuse for the State to continue as a part of its State university a nonstandard law school. Nothing could be more prejudicial to the reputation of the institution throughout the country. Nothing will more certainly drive away from the State the young men of energy and promise who seek a legal education. In the end nothing will react more unfavorably on the quality of the service which the State receives from the members of its legal profession. The committee does not imply that the officers and teachers of the university law school are in any sense to blame for the present condition of the school. They have, in fact, constantly advocated its elevation to standard rank. Within the limitation imposed by meager

equipment and lack of financial support, they have succeeded in rendering valuable service to the State.

The committee recommends that the university law school immediately be placed upon a standard basis. This entails the provision of funds for the increase and maintenance of the library and for additional instructors. The \$7,500 a year asked for by the university for these purposes is evidently not nearly sufficient.

COMMERCE AND BUSINESS ADMINISTRATION.

The increasing urbanization of the population means a relative increase in business and commercial organization. This has already become highly complicated in cities such as Birmingham and Mobile. It is a thing of numerous potential ramifications. Alabama is also one of the gateways of foreign trade. To relate the industries of the State to foreign markets, to exploit these, and to stimulate the growth of the State's commercial enterprise with a view to meeting the conditions of these markets, are projects vital to the State's material progress. Modern business administration rests on the application of science to business problems. The best school for acquiring knowledge of it is no longer the school of experience. Business administration is a university subject. The more progressive universities have recognized this fact and have provided special professional schools to give training in the sciences which underlie commerce and business. As yet the higher institutions of Alabama have been able to do nothing in this direction. The committee is convinced that a State which includes 2 per cent of the total population of the United States, a State which possesses the great commercial prospects which have been indicated, can no longer afford to neglect this field of professional training.

Obviously the appropriate place for its development is at the University of Alabama. The ultimate extent of the undertaking can not be determined without preliminary investigation. Such investigation it will be the province of the State council of education to make. On the basis of its findings the program of the university can be modified from time to time. A modest and safe beginning can be made, however, even in advance of the council's inquiries. The committee judges that the budgetary requests of the university for the establishment of work in commerce should receive favorable action.

FORESTRY.

Even the casual traveler through the State can scarcely fail to be impressed with the value of Alabama's forests to the public welfare. According to an estimate of the United States Forest Service, Alabama is exceeded only by 10 States with respect to the

quantity and value of its standing timber. The amount is estimated at 50 billion feet. The present value of this standing timber, figuring on the conservative basis of \$4 per thousand, is \$200,000,000. The Bureau of Crop Estimates of the United States Department of Agriculture places the 1918 production of firewood at 5,158,000 cords, with a total value of \$13,927,000. The United States census report for 1919 places Alabama third among the States in the quantity and value of its turpentine and rosin products. The production of these commodities in 1909 was valued at \$2,471,999. From these figures it is apparent that Alabama's forests represent one of its chief resources.

In view of the economic importance of Alabama's forests it is remarkable that the State has no educational program to insure their proper development and conservation and a wise utilization of their products. An industry which means so much to the State deserves attention in the State's educational scheme. Not only is it necessary to familiarize the public with the value of forests and with the principles governing their conservation and utilization, but provision should be made for investigation and for the training of forestry specialists to insure proper development of the forestry industry and the industries relating to forestry.

Except for a two-hour course in farm forestry extending through 12 weeks, offered by the Polytechnic Institute, the higher institutions are doing nothing to meet the needs in forestry training. On account of its close relationship with agriculture, the work logically is a function of the Polytechnic Institute. The State should provide money for this purpose. The amount should be sufficient at first to establish a strong department with at least two full-time instructors, and later, as experience dictates, to establish a separate division coordinate with the other divisions of the institute.

TECHNICAL INSTRUCTION OF WOMEN.

The previous discussion of the professional needs of Alabama and the relation of the existing training agencies to them has involved no special reference to sex. In several of the callings and professions mentioned, particularly teaching, women as well as men engage. In less degree, but increasingly, it is true of medicine, pharmacy, and law. There are other activities, however, of which a State educational system must take account that are almost exclusively the sphere of women. The chief of these are home economics, commercial and secretarial service, music, and art.

At present practically all of the training offered by the State in these lines is centered at the Alabama Girls' Technical Institute.¹

¹ Certain service courses in home economics are also given at the University of Alabama.

In this institute the State possesses a school which bears a certain generic resemblance to other schools of similar designation in other States, but which by reason of its wise leadership and of the character of the clientele which it serves is almost unique. The general purpose of the school is a double one, namely, to instruct young women in the arts and sciences that underlie home making, and to give training in the various arts and industries whereby women make a living. It has been unusually successful in accomplishing both ends. Its success has been largely due to empirical methods. Instead of establishing a series of traditional curricula and fitting the student to these in procrustean fashion, it has studied the field which it was designed to serve and has adapted its instruction to the practical duties that its graduates would be called upon to perform. The technical work, however, is based upon a solid substratum of liberal training.

The institute now gives courses of study in home economics, commercial practice, music, and art. Naturally a considerable percentage of its graduates have gone into teaching, because teaching offers the most immediate chance to become self-supporting, and there is a large demand for teachers of the special subjects in which the institute gives training. But the majority of the graduates of the school have become home makers. That this is the case is, in the committee's opinion, the most conclusive testimony of the completeness with which the school has fulfilled its functions.

In the past few years the Alabama Girls' Technical Institute has been subjected to influences which threaten to subvert its distinctive character and to jeopardize its future. The influences arise from two sources. The first is the State requirement of college graduation for the first-grade certificate; the second is the large Federal grant for the development of home economics. Since 1917 the training of teachers in home economics provided for by the Smith-Hughes funds has been centered at the Girls' Technical Institute. This disposition of the federally supported work in home economics has been made because the Alabama Polytechnic Institute has not developed a department of home economics. Undoubtedly it was a reasonable arrangement, in view of existing conditions. It has had two consequences, however, which are unfortunate: It has emphasized, on the one hand, what may be characterized as the normal school aspect of the Alabama Girls' Technical Institute. On the other, it has exerted pressure on the institute tending to change it into a four-year college. The continuance of the work supported by the Smith-Hughes funds is indeed dependent upon the conversion of the institute into a standard college. The pressure exerted by the Smith-

Hughes requirements is reinforced by the State requirement mentioned above.

Now the committee regards both of these tendencies as undesirable, not only from an institutional, but also from a State point of view. The training of teachers ought to be a secondary and incidental function of the institute. It can not be wholly neglected. But if the recommendations for the development of the normal schools are accepted, there will be no need of creating a specialized normal school at Montevallo. The conversion of the institute into a standard college would be a genuine calamity. It can not be accomplished without submerging the valuable and effective work by which the institute has won distinction. Moreover, it would inevitably introduce a new element of competition into a State system of higher education already sufficiently complicated by competitive difficulties.

The solution which the committee proposes is the most radical of its recommendations bearing on higher education. It advises the establishment of a well-equipped division of home economics at the Alabama Polytechnic Institute and the transfer to that institution of all the Smith-Lever extension work in home economics and the Smith-Hughes work in the training of home economics teachers. A necessary corollary is the provision of dormitories or adequately supervised residence houses for women at Auburn. In effect, then, the Alabama Polytechnic Institute would become what the land-grant colleges of most other States already are, the professional college for women in the sciences relating to agriculture and home making. This provision, if adopted, would entail the expansion of the work of the School of Agricultural Education of the Alabama Polytechnic Institute to cover the training of teachers in home economics. It would also reinforce the program of that school for the training of rural life leaders of both sexes.

Until this development is consummated the Alabama Girls' Technical Institute will of course remain the State's principal agency for training teachers of home economics. It should continue its three-year curriculum for that purpose. The committee has already recommended the recognition for high-school teaching positions of its graduates in this subject.

The effect of the proposed action on the Alabama Girls' Technical Institute would be to free it for the work which it alone of existing State institutions is qualified to perform. Until the population of Alabama undergoes essential changes, there will be large need, both quantitative and qualitative, for the kind of training which the Alabama Girls' Technical Institute has given with such conspicuous success. In the committee's opinion this represents a higher mission than joining the already numerous company of four-year colleges.

On the ground of present expense to the State there is little to choose between the two courses indicated. The establishment of a women's division at Auburn would hardly cost more than the thoroughgoing reorganization necessary to convert the Alabama Girls' Technical Institute into a college. The faculty of the institute is not a collegiate faculty in point of training, nor is it large enough in numbers to offer the kind of college education for which the State would be willing to stand sponsor. (See Ch. XXI.) The scientific equipment of the institute would also have to be very greatly increased in the event of the changing of the school to collegiate status.

LIBERAL ARTS AND SCIENCES.

The extent of the facilities which a State needs for education in the arts and sciences is probably more difficult to estimate than the necessary provisions for training in any professional or technical occupation. From the point of view of the ideal a State needs sufficient facilities of this character to provide a liberal education to everyone who is mentally capable of profiting thereby. Economic limitations begin to operate, however, long before the zone of mental limitations is reached. Practically, therefore, the extent of a State's needs in facilities for liberal education is determined by the number who can make use of them. Most States are oversupplied with colleges of liberal arts, viewing the matter from a purely practical standpoint; i. e., most States have within their borders more colleges than can be adequately supported or properly filled with students. States have generally accepted the obligation to furnish in publicly supported institutions liberal education to all those who care to resort to such institutions, regardless of the existence of private or denominational colleges. Assuming this policy to be sound, the question to be asked in any investigation of State provisions for higher education is: Are the facilities for higher liberal education adequate in scope and in quality to meet the demands of the young people who seek general training under State auspices?

The State now maintains one full-fledged college of arts and sciences, namely the college of arts and sciences of the University of Alabama. In addition, three years of general liberal education are offered by the Alabama Girls' Technical Institute, and the Alabama Polytechnic Institute offers a so-called general course which is substantially the equivalent of a liberal curriculum, with a strong scientific emphasis. The enrollment in the college of arts and sciences of the University of Alabama was for the last academic year 568, or almost an even two-thirds of the total enrollment of the university. The enrollment in liberal arts at the Alabama Girls' Technical Institute was insignificant. The enrollment in the general course at the Alabama Polytechnic Institute was 86.

The committee has already recommended that the movement to make the Alabama Girls' Technical Institute a college be abandoned. If this recommendation is accepted, the liberal arts subjects given at the institute would be conceived merely as service subjects; i. e., subjects which are necessary component parts of the technical curricula, but not subjects which might be developed sufficiently to lead in combination to a liberal arts degree.

The general course at the Alabama Polytechnic Institute is incidental to the technical work of that college. The subjects out of which this curriculum is compounded are all subjects in which the institute must give instruction in connection with the several technical specialties. The offering of general science curricula is the common practice of separate land-grant colleges. The practice is only open to criticism when the curricula are so organized or the entrance requirements so administered as to bring the land-grant college into direct competition for students with the college of liberal arts of the State university. The general course at the Alabama Polytechnic Institute is heavily weighted with scientific requirements. (See Ch. XXII.) The committee can not see that it is likely to attract students who properly belong in the college of liberal arts of the university if the same entrance requirements are enforced. The committee has secured no information tending to indicate whether many of the imperfectly prepared students that the Alabama Polytechnic Institute admits are enrolled in the general course. It is later shown that the Alabama Polytechnic Institute admits a larger percentage of ill-prepared students than the university does. As a special safeguard against the suspicion of competitive intention it recommends that henceforth the Alabama Polytechnic Institute admit only such students to the general course as meet the full entrance requirements without conditions. In any event, the committee judges that the general course is only justified so long as it can be maintained as a genuine incidental, without encroaching on the too limited funds of the institute. If it is not to entail extra expense, the enrollment in it must always be small.

With the carrying out of the suggested provisions the University of Alabama will be—as indeed it already is to all practical intents—the only State-supported agency for general education in the arts and sciences. Does the University of Alabama offer facilities for higher liberal education adequate in scope and quality to meet the demands of the young people who seek general training under State auspices? No. The principal present defect of the college of arts and sciences at the University of Alabama is the fact that it is understaffed. There are two unavoidable results of this condition: The professors are overloaded with teaching, and it is impossible to offer advanced work in many of the departments. Confirmation of the

first of these statements is given in Chapter XXI. In no State university which the bureau has investigated are the professors so overburdened with student clock hours, or so extensively reinforced by immature student assistants. A review of the university catalogue shows that in several departments the barest minimum of courses is offered. These conditions are reflected from another angle in the per capita costs of instruction. These are lower at the University of Alabama than at any other State university of which the Bureau of Education has record.

These facts are no discredit to the officers and professors of the university. On the contrary they reflect great credit upon the university authorities. The teachers, sustained by a great hope, have been willing to do double duty on less than sufficient salaries. They have had the courage to confine the offerings of their several departments to such courses as they could give, with due regard to the standards of serious scholarship. The administration has pared expenses to the lowest possible limit. But there is such a thing as cutting to the quick. The committee is of the opinion that the ex-coration of the university has just about reached this point. If the institution is to hold the honorable position it has won in the academic world, it must have immediate relief. At the very least it must raise instructional costs by 50 per cent. This does not take into account the legitimate expectations of growth. The growth of the college of arts and sciences that may confidently be forecast is roughly indicated by extending the curve of enrollment for a period of years. Since the legislature of the State meets but once in four years, allowance for the additional expenses involved in the normal increase of the enrollment must be included in the appropriations. In the opinion of the committee the present budget does not make such allowance. The State must also provide housing facilities for the increasing numbers of women.

RESEARCH.

A modern State system of education has three fundamental functions: It must give liberal and vocational instruction, through the medium of organized curricula, for students in residence; it must assist in the solution of the problems relating to the life and activities of the State and add to the sum of human knowledge through research; it must carry to communities and individuals who can not come to it for formal teaching information and instruction, through the medium of an extension service.

As yet the higher educational institutions of Alabama have been able to do practically nothing toward the fulfillment of the second of these functions. The only field in which a respectable beginning

of a research program has been made is the field of agriculture. Research in agriculture, as has been stated, is supported largely by Federal funds. Outside of this the State has made no provision for research at either of its two principal higher institutions.

Ordinarily the amount and quality of research done at a State institution is in almost direct proportion to the presence on the faculty of men of scientific training who are true to their scholarly obligations. The scantiness of research work done by members of the faculties of the university and the Alabama Polytechnic Institute, does not, however, indicate that the scholarly equipment of these staffs is low. The faculty of the university includes, indeed, an unusually high percentage of men of advanced academic training. That of the Alabama Polytechnic Institute compares favorably in point of scientific training with the faculties of other institutions of its type. The failure of both these groups to be normally productive is due primarily to the fact that they are overloaded with other duties.¹

It is undoubtedly appropriate that in a State where so much that is fundamental to the creation of a system of higher education remains to be done the research projects undertaken in the near future should be intensely practical. A large proportion of them should relate themselves directly to the present industrial problems of the State. The immediate industrial benefit of such research projects as have already been undertaken in the field of agriculture should be sufficient earnest of the material return that may be expected. However, a State university or a State system is hardly worthy the name unless it stands for the promotion of scientific inquiry. There is a large class of investigations totally unrelated to material advantages the results of which have in intangible ways enriched human living and contributed to the progress of civilization. The prosecution of these must depend largely on college and university scholars.

Research is a costly enterprise. Especially in the sciences, expensive equipment is often needed. Always there is involved the release of certain highly trained individuals from other duties. These facts must be faced. But the obligation resting on the higher educational system to promote research can not be avoided. It is part of the burden which the State accepts when it undertakes to subsidize colleges. The committee recommends therefore the development of definite programs of research by both the university and the Alabama Polytechnic Institute, and the inclusion of estimates to cover these programs in their budgets.

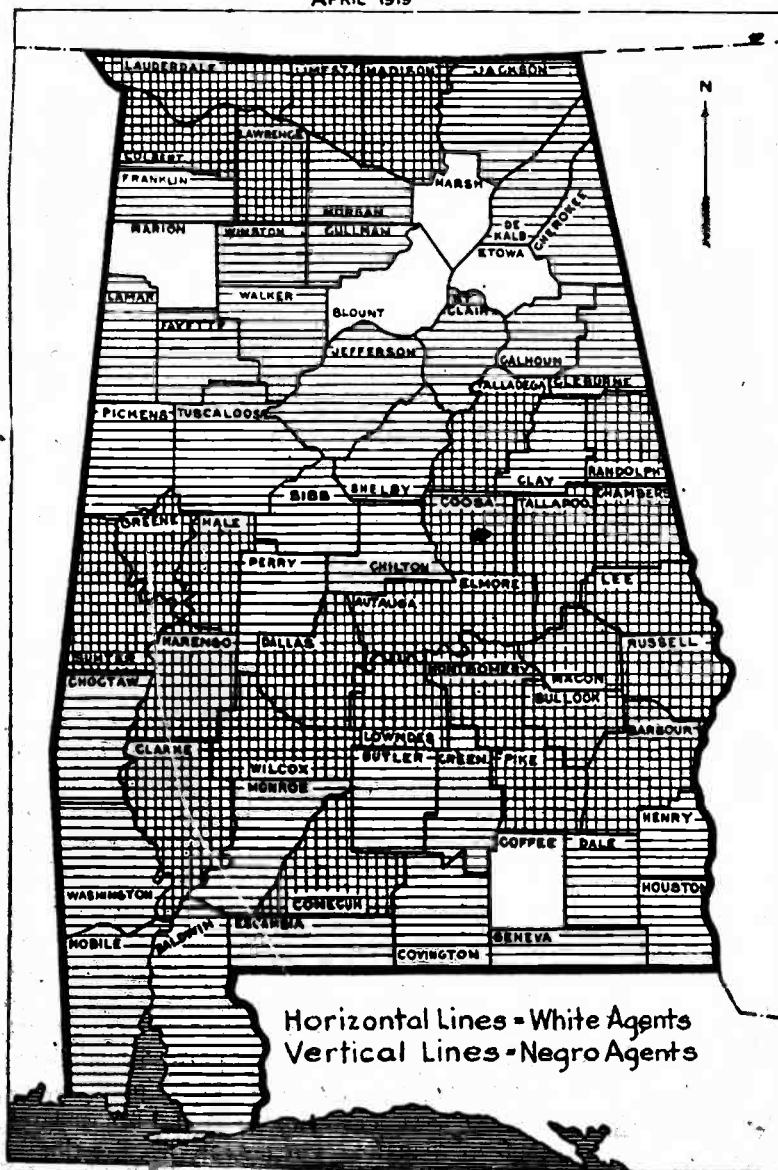
¹There are, of course, a few members of both staffs who have made noteworthy contributions in the field of research. It is the aggregate record of the faculties that is here under discussion.

EXTENSION.

Great changes have taken place in agriculture in Alabama during the past decade and a large share of the credit for this phenomenal development undoubtedly belongs to the extension service of the Alabama Polytechnic Institute. During this period, as a result of the campaign for a more diversified system of farming, according to information obtained through the United States Department of Agriculture, "the cotton acreage has been reduced from 3,730,482 acres to 2,500,000 acres. This means a change from 18 acres per farm to 10 acres per farm on an average. At the same time the corn acreage has increased from 2,572,968 acres to 4,636,000 acres, which is an increase from less than 10 acres to 18 acres per farm. The acreage in peanuts has increased from 100,609 acres to 747,000 acres and the production from 1,573,796 bushels to 17,470,000 bushels. Velvet beans were practically unknown in 1909 and the present acreage is 927,000 acres. The acreage in cowpeas has increased from 85,000 to 527,000. The total hay and forage acreage in 1909 was 238,656 acres, or less than 1 acre per farm. In 1908 the acreage was 1,596,000, or a trifle over 6 acres per farm. The acreage in sugar cane has doubled, while the amount of sirup made is more than doubled. The acreage in sorghum has increased nearly seven times, while the production in gallons of sirup has increased more than ten times. The acreage in Irish potatoes has increased four times, while the sweet-potato acreage has increased two and one-third times. The acreage in oats has not quite doubled, while that in wheat has increased more than ten times. The number of horses has increased 14 per cent; the number of mules 23 per cent; the number of milch cows 26 per cent, which includes an increase of 40,000 in the last year. The number of other cattle has increased 57.6 per cent, an increase of almost 100,000 last year. The increase in the number of hogs is 75.5 per cent, which, excepting for Mississippi and Florida, is the largest percentage of increase of any State in the Union. In 1909 the number of hogs slaughtered and sold was 704,700, valued at \$7,747,000; in 1918 the number slaughtered and sold was 1,405,800, valued at \$33,735,000."

And yet the field is barely scratched. The acreage devoted to the crops mentioned above represents only an insignificant part of the total tillable land of the State. The possibilities for development are enormous. These relate not only to the matter of agricultural production, but the whole field of country life abounds with opportunities for service. Much effort is still needed to change public opinion toward farming as an occupation and to place it on a higher level in the minds of the people of Alabama. Progress in this direction is dependent to a large extent upon making farming profitable for the farmers who live on small acres and who depend mainly upon their own labor and that of their families. To make such efforts profitable

ALABAMA EXTENSION SERVICE
 Map showing FARM DEMONSTRATION AGENTS in ALABAMA
 APRIL 1919



necessitates localization of certain agricultural interests and the development of cooperative methods.

The support of the agricultural extension program in Alabama has been fairly liberal in comparison with other Southern States, but the conspicuous weakness of the undertaking is found in the fact that the salaries offered are not sufficient to attract the best talent. The following statement shows the maximum, minimum, and average salaries paid to county agents and home demonstration agents in the Southern States as for December, 1917:

TABLE 63.—County agricultural agents.

States.	Average salary.	Highest salary.	Lowest salary.
Alabama.....	\$1,512.88	\$2,002.00	\$450.00
Arkansas.....	1,635.23	2,449.92	700.00
Florida.....	1,514.23	2,400.00	900.00
Georgia.....	1,585.08	2,250.00	1,000.00
Kentucky.....	1,629.87	2,008.00	1,020.00
Louisiana.....	1,462.22	2,712.00	1,200.00
Maryland.....	1,940.05	2,400.00	1,204.00
Mississippi.....	1,851.33	3,000.00	900.00
North Carolina.....	1,485.14	1,880.00	540.00
Oklahoma.....	1,668.23	2,040.00	1,340.00
South Carolina.....	1,509.35	2,800.00	1,000.00
Tennessee.....	1,462.35	2,100.00	1,020.00
Texas.....	1,739.91	4,000.00	1,200.00
Virginia.....	1,405.56	2,000.00	391.01
West Virginia.....	1,731.72	2,299.92	949.92
Average.....	1,620.54		

TABLE 64.—County home demonstration agents.

States.	Average salary.	Highest salary.	Lowest salary.
Alabama.....	\$458.24	\$1,200.00	\$495.00
Arkansas.....	949.50	1,560.00	600.00
Florida.....	1,142.73	1,801.00	600.00
Georgia.....	939.90	1,200.00	490.00
Kentucky.....	850.23	1,500.00	500.00
Louisiana.....	1,145.56	1,320.00	900.00
Maryland.....	1,050.61	1,500.00	800.00
Mississippi.....	1,020.42	1,740.00	500.00
North Carolina.....	868.00	1,370.40	280.00
Oklahoma.....	1,045.79	1,260.00	980.00
South Carolina.....	989.18	1,126.36	825.00
Tennessee.....	907.21	1,792.00	450.00
Texas.....	952.84	1,752.00	625.00
Virginia.....	796.96	1,100.00	360.00
West Virginia.....	729.20	1,200.00	115.00
Average.....	941.40		

There are many well recognized defects in the social life of the farming people. This is true throughout the whole country, but it is especially true in the Southern States. Uncomfortable living conditions and the lack of social opportunities drive many people from the country to the town. The allurements of the city may be greatly

diminished by reducing the contrast between the living conditions of the city and those of the country. The nature of the extension service requires, and the prospective result is sufficient to attract, the best talent available—men and women with vision, ability, and enthusiasm.

From these figures it may be seen that Alabama is neither among the lowest nor the highest States in the matter of salaries paid to agricultural and home demonstration agents. It is apparent, however, that the salaries paid are not high enough in view of the quality of service demanded. The State should recognize the magnitude and the possibilities of the undertaking and be prepared to support it accordingly. It should assume an ever-increasing proportion of the responsibility for its financial support. The State can not afford to neglect the support of a program which means so much to its economic prosperity and to the social welfare of all its citizens.

Aside from financial support, the extension program needs careful organization and administration. As suggested in Chapter XXI, the program is large enough to demand the undivided attention of the director of the division. The necessity for assigning the full time of an administrative officer to the extension service will be the more imperative if the scope of the work is extended to include all lines of effort represented within the scope of the institution, including the various phases of engineering which will comprehend activities connected with the social conditions of industrial workers. The undesirability of the present arrangement is reflected in a general feeling of unrest among extension workers. There is a feeling also that while very effective work is being done in several lines, the program as a whole is not well coordinated. The workers in one department are unfamiliar with the work of other departments. They express the desire for more frequent general and individual conferences with the director.

UNIVERSITY EXTENSION.

There is a great need in the State of Alabama for the general university extension service contemplated by the University of Alabama. The amount of money recommended in its budget is insufficient to do very much. However, it may be all that the University can hope to secure at this time, and it is better to make a beginning so as to demonstrate sufficiently to the people of Alabama the value of extension work possible through their university. In time the extension division at the university should have a large number of practical courses in engineering and commercial subjects, as important to the industrial life of the State of Alabama as agricultural extension is to the agricultural interests of the State. It is equally important

that the extension work of the University of Alabama contribute information and training in the cultural subjects and social sciences.

HIGHER EDUCATION OF NEGROES.

The touchstone of the State's needs should be applied to the problem of the higher education of negroes. The application of it would, in the committee's opinion, reveal certain striking facts. It would show first of all that there is within the confines of the State a segregated social group numbering 1,023,231. Its members live a life in many ways distinct from that of the whites. They have practically no part in public affairs. The point of contact is chiefly in the domain of labor and business, using these words in their broadest sense.² Even in these domains the contacts are limited. Under these limitations the colored group commands only to a very slight extent the professional services of the specially trained whites. The State of Alabama is therefore in a sense two States, the geographical boundaries of which coincide. There is the white State of Alabama, a community of 1,356,374 inhabitants, and the colored State of Alabama, with a population of 1,023,231.

Attempt has been made to summarize the higher educational needs of the first of these. What of the other? The committee assumes that the colored population is in tutelage. To promote its development the State maintains inadequate elementary schools and makes very limited provision for normal training. Under the influence of these the general level of intelligence of the colored race is being gradually raised. There is evolving a vast community (a community larger, for example, than the State of Oregon, the State of South Dakota, the State of Minnesota), with fundamental interests not essentially dissimilar from those of the white community. It is self-evident that such a community needs enlightened leadership. By reason of its segregation from the white community, this leadership must come from within the colored race itself. Elementary considerations of public interest demand that provision be made to train competent colored leaders.

What are the present provisions for the training of colored leaders? Aside from the limited provision for normal training the State assumes a partial responsibility for the Agricultural and Mechanical College for Negroes. A large portion of the work of this institution—indeed all of it that is above secondary grade—is also in the field of teacher-training. At the present time the State maintains no agency in which qualified members of the colored race can secure collegiate training in agriculture, in the mechanic arts, or in liberal arts.

The most thoughtful and sympathetic students of Negro education agree that the best interests of the race demand the development first of all of facilities for training in productive activity. Not until a majority of the race is economically efficient is it desirable to encourage the establishment of many institutions devoted to higher liberal training. For a State which supports neither technical colleges nor liberal colleges for Negroes obviously the provision for technical education should be made first.

Now the State of Alabama is under an obligation more compelling even than that of self-interest to provide for the higher technical training of its colored citizens. It is under a moral obligation. It has accepted the Federal funds for the support of the land-grant colleges, and in so doing has pledged itself to carry out the purpose for which these funds are granted. It has divided the funds, as is the custom of the Southern States, and has assigned that portion of the Agricultural and Mechanical College for Negroes to which the college is entitled on the ground of the ratio of colored to white in the total population. But it has not carried out the implied terms of the contract. The State's treatment of its Agricultural and Mechanical College for whites has been parsimonious enough; nevertheless, it has enabled that institution to meet the Federal requirements. The Agricultural and Mechanical College for Negroes has received but \$4,000 a year from the State since 1885. No special appropriations have been made to it. There has been no increase in the regular appropriation to meet the growth in enrollment and the advancing cost of maintenance. There have been two results highly discreditable to the State, results for which the officers of the institution are in no wise to blame: The college has been obliged to violate the regulations governing the expenditure of the Morrill funds, and it has run into debt. The Bureau of Education has treated the violations of its regulations with the utmost leniency, realizing the insuperable difficulties which the institution has had to face and believing that the continuance of the college was more important than exact conformity to the general requirements. The time is at hand, however, when the bureau can no longer continue this policy. The failure of the bureau to certify the college to the Secretary of the Treasury would force it to close its doors.

The Agricultural and Mechanical College for Negroes is not now a collegiate institution. It could not advantageously become one in the near future. The committee is of the opinion that the development of it into a genuine college should be a matter of very gradual growth. Not until it can provide for the sound training in practical agriculture and the mechanic arts of all those who choose to resort to it, should the addition of technical courses of collegiate grade be

considered. The committee believes that the institution should be encouraged and enabled to develop along lines similar to those followed by the Tuskegee Normal and Industrial Institute. This entails large provisions for farm training and trade training. A respectable beginning could hardly be made for less money than is asked for in the present budget of the institution.

STATE COUNCIL OF EDUCATION.

The foregoing discussion is predicated upon the self-evident needs of the State of Alabama for various types of higher education. The determination of the future educational policy of the State should rest upon a careful and continuous study of these needs. In the past the development of higher education, not only in Alabama, but more or less throughout the country, has not been based upon such study. It has proceeded largely by guesswork. The interests of the State in a unified and economical program have been subordinated to institutional ambitions and to political pressures wholly unrelated to education. Both of these distorting and costly influences can be eliminated. A simple and inexpensive device will serve the purpose.

The committee has already recommended the establishment of a State council of education composed of two members of the State board of education and the State superintendent of public instruction, one member of the governing board of each of the three higher institutions for whites, and the president of each of these institutions. The council's major task would be the coordination of the educational efforts of the State. Coordination must rest upon a clear comprehension of the ends to be sought. The State council should therefore be required by law to investigate the major fields of productive activity and to report on both the numbers of workers required in each field and the kinds of training necessary to fit them for their several tasks. Such information would enable the schools within limits to direct the flow of students to the vocations with the largest opportunities and to adapt training progressively to the specific demands of each calling. Probably the first of the council's investigations should be in those unexplored fields of professional practice which have been discussed in this chapter.

On the basis of its findings the council would be in a position to allocate wisely among the existing agencies the different portions of the task of training in harmony with their legally prescribed limitations and the division of the educational field among them. It should be empowered to do so.

The experiences of the war have furnished a new understanding of the importance of the cooperation of nonofficial civic agencies in

determining State and National policies in whatever field. The committee therefore suggests that there be associated with the State council of education two advisory boards; one composed of delegates from the central State bodies representing agriculture, commerce, transportation, manufacturing, and labor; the other composed of representatives of educational interests such as the State Teachers' Association, the State Association of Colleges, etc. The advisory board representing productive interests would assist in determining the sequence and range of the council's investigations and would enlist the cooperation of the industries. The educational advisory board would aid in devising methods of instruction and in interpreting to the schools the purposes underlying the work of the council.

Chapter XXI.

ADMINISTRATION OF HIGHER EDUCATION IN ALABAMA.

I. GOVERNMENT.

Form and character of governing boards.—In common with many of the earlier-settled States Alabama has provided for higher education in more than one institution. The three institutions of higher learning in this State were established at different times and were placed under separate boards of control. The board in each case includes the governor and the State superintendent of education as ex-officio members and a representative from each of the 10 congressional districts. The boards of the university and the Polytechnic Institute have an additional member from the district in which each is located, making a total of 13 members. The board of the Girls' Technical Institute comprises two additional members from the State at large, making a total of 14 members. The members of the university and the Polytechnic Institute boards hold office for 12 years, while those of the Girls' Technical Institute hold office for 8 years.

The appointments of the several boards are made in such manner as to provide for a continuation in service of a majority of the members. In the case of the Alabama Girls' Technical Institute, as explained elsewhere, this does not always hold true. The members of the university board are nominated by the remaining members of the board, while those of the other two institutions are nominated by the governor. The nominations in all three cases are contingent upon the approval of the senate at the first succeeding session of the legislature, but the nominees serve from the date of nomination.

It will be noted that the method of appointment of the university board is quite different from that of the other boards. It is generally believed that a board appointed by the governor is more directly responsible to the people, but in Alabama there seems to have been very little objection to the self-appointed board. In this case it is claimed that the interests of the people are fairly well safeguarded by the provision that the nominations must be approved by the senate. On the other hand, it is frequently asserted that the self-appointed board is able either to maintain or to change policies of administration by the selection of men of known opinions.

Both in the institutions affected and throughout the State there seems to be complete satisfaction with the governor-appointed boards. The appointees, during recent years, have been men of good standing and generally have performed their duties to the entire satisfaction of the people. In most States trustees of State universities are appointed by the governor. Of the 43 State universities of the country, 35 are appointed—31 by the governor, 3 by the legislature, and 1 by the State board of education. Five are elected by the people and three are self-perpetuated. Besides that of the University of Alabama the self-perpetuating boards are those of the State university of New Jersey (Rutgers) and Cornell University. In both of these cases the interests of the people are safeguarded by special provisions. In the case of New Jersey, a State board of visitors, appointed by the governor, is provided. The board of Cornell comprises 40 members, only 15 of whom are self-perpetuating. Of the remainder, 5 are appointed by the governor, 10 by the alumni, 1 by the State senate, 1 by bequest, and 8 are exofficio members.

It may be seen that the University of Alabama stands practically alone among State universities in the method by which its board of control is provided. The consensus of opinion both within the State and throughout the country is strongly in favor of the governor-appointed board and in view of the general approval of the principle as applied to the other Alabama State boards, there seems to be no reason for questioning its adaptability to the university.

The following table shows from the standpoint of occupation the composition of each board and of the all three boards combined. The exofficio members are not included:

TABLE 85.—Occupation of board members.

Occupation.	State University.	Poly-technic Institute.	Girls' Technical Institute.	Combined boards.
Banker.....		1	2	3
Engineer.....		1		1
Farmer.....	2	1		3
Housewife.....			1	1
Lawyer.....	18	16	15	20
Manufacturer.....	1		1	2
Merchant.....			3	3
Physician.....		1		1
Public service.....		1		1

1 One of this number operates a farm.

Thus it appears that out of a total of 34 appointed members constituting the three boards, 20 are drawn from the legal profession and only 14 from all other occupations. In connection with the composition of these boards the objection has been raised to such a strong preponderance of lawyers and such a meager representation of the dominant interests of the State. It is rather remarkable that more

farmers, merchants, and manufacturers have not been selected, but this is not necessarily a proof of weakness. It is an indication, however, that men with political aspirations have been selected rather than those who may be better qualified but who must be urged to accept public offices. In the nomination of men for representation upon boards of control, the representation of special interests or classes is not the chief consideration, but rather to select men with breadth of vision and with deep public spirit. The evidence collected shows that in general men of this type have been selected during recent years. Lack of interest manifested by nonattendance at meetings is the most serious charge that may be laid against the members comprising the boards of the past few years and this charge must be restricted to a small proportion.

Although the three higher institutions admit women, the appointment this year of women to the board of trustees of the Alabama Girls' Technical Institute marks the first case in which a woman has been selected for any of the boards. It would seem that the board of each institution where women are enrolled should include at least one woman.

In size the Alabama boards are larger than the average and somewhat larger than is generally believed to be the most appropriate size from the standpoint of expeditious legislation. The number of members comprising each board, however, is not objectionally large and for Alabama is to some extent an advantage in that all sections of the State may be represented.

The committee commends Alabama's practice in appointing its board members on a fractional basis. This practice generally renders it difficult for any administration to appoint a controlling fraction. In the case of the Alabama Girls' Technical Institute, however, the practice is to appoint one-half of the board at alternating sessions of the legislature. This frequently enables the administration in power to appoint a majority of the members. Of the present board 7 out of the 12 appointed members were nominated by the present governor.

The committee commends also Alabama's practice of appointing members for long terms. Such practice lends dignity to the office, resulting generally in attracting better men to fill vacancies. It is the belief of the committee, however, that the board of the Alabama Girls' Technical Institute should be appointed for 12 years in harmony with the other two boards.

The committee commends also the practice of remunerating members only for expenses incurred upon attendance at meetings. Experience has shown that a better type of board member generally may be obtained on a gratuitous basis than when the position carries a salary. The reason for this is that the salaries usually offered are not adequate to attract the men and women who should be appointed.

Powers and duties of boards of control.—The powers and duties of the boards of the university, the Polytechnic Institute and the Girls' Technical Institute are described in articles 21, 24, and 25, respectively, of chapter 41 of the Code of 1907. These may be summarized as follows:

1. The State University.

(a) (Section 1869.) "To carry into effect the purposes and intent of the Congress of the United States in the grant of lands by the act of April 20, 1818, and of the act of March 2, 1819, to this State, to be by it held and administered for the benefit of a seminary of learning."

(b) (Section 1870.) General powers, duties, and liabilities of such corporation.

(c) (Section 1871.) Power of holding and disposing of property.

(d) (Section 1875.) To organize the university by the appointment of instructors and officers; and to fix their salaries and to increase and reduce the same.

(e) To institute, regulate, alter or modify the government of the institution.

(f) To prescribe courses of instruction, rates of tuition, price of board, and regulate the necessary expenses of students.

(g) To confer such academic and honorary degrees as are usually conferred by literary institutions.

(h) To delegate powers to faculty.

(i) (Section 1876.) To elect by secret ballot board members to fill vacancies.

(j) (Section 1878.) Shall meet at least once in each year.

(k) (Section 1879.) Proceedings must be recorded.

(l) (Section 1880.) Shall make a full report of transactions at each meeting of the legislature.

(m) (Section 1886.) May sell, lease, or make other disposition of lands, selected under act of Congress of April 23, 1834.

(n) (Sections 1887 and 1888.) May create an executive committee of board members upon which may be conferred full power in the leasing, selling, or conveying of university lands.

2. The Alabama Polytechnic Institute. The powers and duties of the board of this institution are similar to those of the university board, differing mainly in the following particulars:

(a) It is charged with the duty to carry out the provisions of the Federal act of 1862 instead of those of 1818 and 1819.

(b) It is empowered to confer such academic and honorary degrees as are usually conferred by institutions of similar character.

(c) The board is not given the power to fill vacancies on the board itself.

(d) No power is specifically indicated for the disposition of property, for the delegation of authority to faculty, nor for the creation of an executive committee with the full authority of the board, but in a blanket provision the board may do whatever else they may deem best for promoting the interests of the institute.

3. The Alabama Girls' Technical Institute. The powers and duties of the board of this institution are somewhat different from those bestowed upon the boards of the other higher institutions of the State.

(a) (Sections 1912 and 1913.) General corporate powers.

(b) (Section 1914.) To provide for instruction in the liberal arts and sciences; to provide for the establishment of the following academic departments:

(1) English, (2) mathematics, (3) history and political economy, (4) psychology and education, (5) ancient languages, (6) modern languages, (7) chemistry and geology; (8) physics and astronomy, (9) biology—botany, floriculture, and horticulture; and to provide for the establishment of the following industrial departments: (1) art—drawing, painting, and designing; (2) vocal music; (3) instrumental music; (4) commercial bookkeeping, stenography, typewriting, telegraphy; (5) domestic art; (6) domestic economy; (7) dairying; (8) physical culture; (9) manual training.

(c) (Section 1915.) To confer regular and honorary degrees and to grant diplomas or certificates.

(d) (Section 1916.) Shall elect a president with specific qualifications and fix the salary of the office.

(e) (Section 1917.) Shall establish such additional departments in the school as they deem necessary and proper and fix the salary or compensation to be paid to the professors, directors, and instructors therein. Officers of instruction shall be appointed by the board upon nomination of the president of the institute.

(f) (Section 1918.) Shall elect a secretary and fix the compensation and prescribe the duties of such officer.

(g) (Section 1919.) Shall elect a treasurer and fix compensation.

(h) (Section 1920.) Power to remove treasurer in case the institutional funds are in danger of being lost, and appoint a temporary custodian.

(i) (Section 1928.) Power to condemn property needed by the institute.

(j) (Section 1930.) Upon the approval of the governor, may sell or convey lands granted by Congress to the State of Alabama for the use of the institute.

These prescriptions of the powers and duties of the governing boards are not radically different from those of boards of higher institutions in many other States, and have resulted in little or no confusion, at least during recent years. The chief deficiencies of these prescriptions are found in the failure to restrict the powers and duties rather than to broaden their scope. For example, practically unlimited power in the establishment of departments is conveyed by the failure to restrict the scope of each institution. The only restriction on the board of the university in this respect is found under "g," which gives the power to confer such academic and honorary degrees as are usually conferred by literary institutions. The term "literary institutions" is not defined and the board has not limited the institution to the conferring of degrees for literary achievement.

With regard to the Alabama Girls' Technical Institute the board is given definite powers concerning the scope of the instruction. This definition of the scope, however, loses some of its force in a later provision authorizing the board to "establish such additional departments in the school as they deem necessary and proper."

In the prescribed powers and duties of the board of the Alabama Polytechnic Institute the only suggestion limiting the scope of the institution is that contained in the article of incorporation (section 1899, of the Code of 1907) which provides for the establishment of a board of trustees "to carry into effect the purpose and intent of

the Congress of the United States in the grant of lands by the act of July 2, 1862." Such act provides that the proceeds from the sale of lands donated by the Federal Government shall constitute a perpetual fund the interest from which shall be appropriated by the State "to the endowment, support, and maintenance" of a college. "where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts."

It is to the credit of the board of the Polytechnic Institute that the purpose and intent of this act has been fairly interpreted and executed. The institute, in 1884, ceased to offer a curriculum leading to the A. B. degree. It has continued up to the present time to offer a "general course" leading to the degree of B. S. This curriculum constitutes a combination of general service courses all of which, with the exception of Latin, are required in the technical curricula offered to agricultural and engineering students. Latin is required of pharmacy students. This curriculum, therefore, may be regarded as an incidental item in the institution's program and the same is true of the premedical curriculum recently offered. The latter, however, has a definite aim and since it duplicates the work of the university may be regarded as a radical departure from the institution's long-established policy.

Furthermore, there is little in these prescriptions that limits the functions of the several boards. Aside from certain unusual or specified functions, the sphere of a governing board generally is limited, either by legislative action or agreement, to three main activities; namely, (1) The determination of the general policies of the institution under its control, in consultation with the executive officers; (2) the appropriation of moneys, or the approval of the allotments made by public appropriating bodies; and (3) the appointment of institutional employees on the recommendation of the institutional executive officers. From the information at hand it is apparent that the governing boards in question have generally acted in harmony with these principles.

Centralized control.—While many States probably have profited from the promotion of higher education through a single institution, the practice has not always proved satisfactory, especially in the Southern States. It would seem, therefore, that in the light of the experience of some of the neighboring States, Alabama has profited from maintaining at least two distinct institutions of higher learning—the State University and the Polytechnic Institute. In the years following the passage of the land-grant act of 1862 and the establishment of the older colleges under its provisions, agricultural education, and in a lesser degree, industrial education, were rela-

tively unpopular and there was little available knowledge upon which to base courses of study. Furthermore, the increasing demand for training in the liberal arts and in the higher professions resulted in the swelling of the enrollments and consequently in greatly increasing the operating expenses. Under such conditions the funds for agricultural and industrial education, in States where the land-grant college was associated with the university, were often more or less submerged in the general funds of the university.

In some States the land-grant college has been completely detached from the university after a period of combined administration. In Georgia the separation was not so complete, but it was found desirable to place the land-grant college under a board which, although subordinate to the university board, is quite distinct in administrative control.

The following statement shows in a general way how the several States have organized their higher education:

(1) States having all higher education consolidated in a single university, comprehending all departments provided in the State, with centralized administration and under a single board of control: Arizona, Arkansas, California, Idaho, Illinois, Kentucky, Louisiana, Maine, Minnesota, Missouri, Nebraska, Nevada, Tennessee, Vermont, West Virginia, Wisconsin, Wyoming.

(2) States having a single college (commonly a land-grant college for agriculture and the mechanic arts) and not providing other forms of higher education in a State institution:¹ Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, Rhode Island, Pennsylvania.

(3) States having two State institutions (unless otherwise indicated a State university and a land-grant college for agriculture and the mechanic arts): Alabama, Florida (State University, State College for Women), Indiana (Indiana University, Purdue University), Kansas, Michigan, North Carolina, North Dakota, Oregon, Utah, Washington.

(4) States having three or more State institutions: Colorado, Georgia, Iowa, Mississippi, Montana, New Mexico, New York, Ohio, Oklahoma, South Carolina, South Dakota, Texas, Virginia.

Thus it appears that 25 States provide in one institution whatever higher education is afforded; 10 States maintain two separate institutions, and 13 States maintain three or more higher institutions. Eight of the States maintaining two or more institutions, Florida, Georgia,² Iowa, Kansas, Mississippi, Montana, North Dakota, and

¹ A number of States partially support higher education in one or more institutions over which they have no control. Such institutions are not regarded here as State institutions.

² The University of Georgia comprises several quite independent units, each with a distinct board, but all are subordinate to the university board.

South Dakota have consolidated higher education under a centralized board of control.

While conditions existing in Alabama during the early development of the higher institutions probably justified the promotion of higher education in three distinct institutions, it is very doubtful whether, either from the viewpoints of economy or efficiency, such an arrangement should be continued. However, the experience of other States shows that on account of regional pride and attachment the abandonment or the removal of a long-established institution is almost impossible. The best that can be expected is that the fields of the several institutions be so defined and restricted as to prevent wasteful duplication.

Assuming that the three higher institutions are to be maintained, the chief problems in higher education from the viewpoint of administrative control are the following:

1. What provision can be made to insure proper development in all needed branches of higher education and at the same time to prevent wasteful duplication and unjustifiable expansion?
2. How may the three institutions be administered so as to prevent sectional and institutional competition for students and financial support?
3. How may the work of the higher institutions be coordinated with that of the public school system?

It is obvious that the solution of all three of these problems turns upon the consideration of the programs of higher education in the State as a single program. This point of view has already been emphasized in Chapter XX. In that chapter and in Chapter IV the creation of a State council of education has been recommended and certain of its functions discussed. In addition to what has already been said it should here be sufficient to note that the council is expected to make recommendations to its constituent boards concerning all matters affecting two or more institutions or affecting the relations of the higher institutions with the public school system in general. Matters of policy may originate either with the separate boards or with the council, but in general such matter would originate with the separate boards.

II. INTERNAL ADMINISTRATION.

The University.—The university comprises five coordinate major divisions, as follows: College of arts and science, college of engineering, school of education, school of law, and school of medicine. The dean in charge of each of these divisions is responsible to the dean of the university who in turn is responsible to the president of the university. All deans, however, report directly to the president

concerning financial matters relating to their respective divisions. Two other administrative officers—the treasurer and the dean of women—report directly to the president. The librarian and the director of the museum are directly responsible to the dean. The administrative relationships differ from those in some State universities in that the deans of the several divisions have no direct administrative relationship with the president. Such an arrangement relieves the president of much administrative detail and enables him to devote more time to the larger problems of the university.

The dean of women acts largely as an advisor and as an officer of discipline.

The present treasurer serves as purchasing agent for the institution and gives some instruction in engineering. Since all financial matters must pass through the office of either the dean of the university or the president, the several divisions and departments have no direct connection with the treasurer's office.

The functions of the deans of the several divisions are similar to those of deans in other State universities. The dean of the college of arts and sciences is also dean of the university and serves as head of the department of English. In addition to the regular duties of these positions he is responsible for the registration and classification of students in all divisions.

The dean of the school of education, in addition to his duties as dean, is responsible for the inspection of high schools and serves as professor of education and director of the summer school. He is also responsible for the special training of teachers of trades and industries under the provisions of the Smith-Hughes act.

The dean of the college of engineering serves also as head of the department of civil engineering.

The dean of the school of medicine, who maintains a private practice in the city of Mobile, serves also as professor of obstetrics and has general supervision of the department of pharmacy which is associated with the school of medicine.

The dean of the school of law, likewise, serves as professor of law.

The legislative body of the university is the university faculty comprising all professors, associate professors, assistant professors, and instructors. The institution has provided for an advisory council comprising seven faculty members. This body "designed to discuss questions of importance that arise from time to time between faculty meetings * * * . No action, however, is taken by the council that is not subject to review by the faculty."

Faculty committees are provided for matters concerning (a) admission, (b) instruction (a separate committee for each division), (c) library, (d) athletics, (e) student publications, (f) university

publications, (g) student organizations, (h) affiliated schools, (i) recommendation of teachers, (j) graduate study, and (k) examinations.

The Alabama Geological Survey, although not organically connected with it, is closely related to the university. The director of the survey is emeritus professor of geology and director of the university museum.

The Polytechnic Institute.—The institute as now organized comprises seven major divisions as follow: (1) College of agricultural sciences, (2) college of engineering and mines, (3) college of veterinary medicine and surgery, (4) academic departments, (5) summer school, (6) agricultural extension service, (7) agricultural experiment station. Each of the first four divisions is in charge of a dean and each of the latter three is in charge of a director. The deans and directors are directly responsible to the president. In addition to the above-mentioned divisions, there is a group of separate departments including education, physical training, and library, the heads of which are also directly responsible to the president. Among the departments of the college of agricultural sciences is the department of pharmacy.

The functions of the office of dean are somewhat different from those of such an office in most institutions and the administrative authority of the office is more limited than is usually the case. The following extracts from the "General Regulations" of the institution will show the tendency to handle in the office of the president many matters that are generally handled in the offices of the respective deans:

Section 37. If a student repeatedly absents himself from recitations, whether on account of sickness, or other cause, or manifests a continued want of application or capacity, the instructor will promptly submit the matter to the president.

Section 54. Excuses must be made to the president at the first office hour, either orally or in writing, as he may require.

Section 62. Students compelled to be absent from any recitation shall apply for leave to the professor; to leave the college, to the president; to be excused from military duty, to the commandant.

Furthermore the lines of demarkation between the divisions are not well marked. The limits of the jurisdiction of the dean of academic departments, for example, have never been defined and seem to vary according to the nature of the matter under consideration. Considerable confusion and loss of initiative have resulted from this loose scheme of organization.

The dean of agricultural sciences serves also as professor of general and agricultural chemistry and as State chemist in charge of the analysis of fertilizers, oils, feeds, etc. The dean of the college of en-

gineering and mines is also professor of mechanical engineering and director of the laboratories for the testing of fuels, gases, and lubricants. The dean of the college of veterinary medicine and surgery is also professor of physiology and veterinary science and State veterinarian in charge of hog-cholera control. The dean of the academic departments serves also as professor of history and Latin and is responsible for the classification of students in all divisions.

The director of the summer school is also head of the department of education, which, in the catalogue, is listed as the "school of agricultural education" and which is distinct from the other administrative divisions.

The director of the agricultural extension service serves also as director of the agricultural experiment station and head of the department of agronomy.

In business or financial matters the relationship is a direct one between the president and the several department heads. The president assumes the responsibility for the allotment of funds and approves all expenditures. Such a procedure multiplies the administrative duties of the president's office, and even with the assistance of the executive secretary, renders it difficult for the president to give appropriate attention to the larger problems of administration. The executive secretary serves as registrar and without any definite detail of authority assists the president in various administrative matters.

Committees are provided for the handling of matters relating to (a) discipline, (b) entrance examinations, (c) examination of special students, (d) public lectures, (e) library, (f) athletic, (g) grounds and buildings, and (h) alumni appointments. There is no committee on courses of study.

Many administrative complications have arisen also as a result of attempting to promote three or four lines of service through a single specialist. In other words, certain members of the faculty are also members of the experiment station staff, the extension force and the police-control work of the State and their salaries come from various sources. One individual, for example, serves as professor of horticulture, horticulturist of the experiment station, extension specialist in horticulture, and State horticulturist in charge of nursery inspection throughout the State. While there are few such cases as this, there are many cases where two and three offices are combined. The shortage of funds of course is responsible for the existence of such a condition. The deleterious effect of such dispersion of effort is quite obvious.

It will be observed, therefore, that the institution is organized both from the standpoint of subject and kind of service. That is, the in-

stitution performs four distinct lines of service—resident instruction, extension instruction, research, and police control or inspection. Each line of service is separately financed, each forms a distinct program, and each requires a different type of personnel. These four kinds of service therefore form a logical basis for a division of responsibility. It is obvious that an institution performing four distinct lines of service should be organized differently from one performing but one function.

Furthermore, since each of these lines of service is concerned with the same subjects, it is natural that each should be organized from the standpoint of subject matter in about the same way. The division responsible for resident instruction, it seems, should be organized or subdivided in about the same manner as a college or university with the single function of resident instruction.

The officers of the institution recognize these four lines of service, and they also recognize the four organic divisions based upon subject matter—agriculture, engineering, veterinary medicine, and academic subjects. Confusion has arisen, as in other similar colleges, from an attempt to administer the former divisions as parallel with the latter. In reality the lines of administrative control pass transversely through the various subject-matter divisions. Failure to recognize this fact renders it difficult to understand administrative relationships.

There is a growing tendency among the land-grant colleges to bring about a more distinct organization for each line of service. This is particularly true with regard to the extension and control phases. While in the main a distinct staff of specialists is recommended for each line of service, there is a common belief that the specialists in one line may profitably undertake a limited amount of work in one or more other lines. Where the work is placed on the project basis, and where a definite time is indicated for each project, such an arrangement is not difficult to provide for. There are grave dangers, however, in requiring specialists to contribute to more than two lines of service. The difficulty in prorating salaries and the loss in efficiency from diversification are intensified in proportion to the number of lines of service participated in by the several members of the staff.

The more complete separation of the lines of service does not mean, necessarily, that the specialists engaged in a common subject should be separated. The consensus of opinion is strongly in favor of bringing together in a common department all specialists engaged in a common subject, regardless of whether they are specialists in teaching, in extension, in research, or in inspection.

The Girls' Technical Institute.—The organization of the Alabama Girls' Technical Institute is a simple one, comprising 13 departments, the heads of which are responsible directly to the president. The professor of mathematics serves also as dean, which office is maintained largely for purposes of discipline. The professor of history serves also as purchasing agent.

III. CONCLUSIONS CONCERNING ORGANIZATION AND ADMINISTRATION.

Considering the disadvantages under which the State is promoting higher education, especially by reason of having to conduct the work in three institutions, the administrative organization, in many respects, is commendable. Only in a few respects are modifications suggested:

1. The constitution should be modified to provide for the appointment by the governor of members of the university board of trustees.

2. The constitution should be modified to provide for lengthening the tenure of office of the members of the board of trustees of the Girls' Technical Institute in conformity with that of the members of the boards of the other higher institutions of the State.

5. That the Alabama Polytechnic Institute may be reorganized in such manner as will distribute the administrative load, the following plan is suggested:

The institution may be divided primarily into four administrative units—one for each kind of service: resident teaching, extension teaching, research, and control. Each of these divisions should be in charge of a director, who shall be responsible to the president. Each should be subdivided in about the same manner as colleges performing a single service, that of resident teaching. This secondary subdivision is based wholly upon subject-matter relationships and provides for agriculture, engineering, home economics, veterinary science, and general service subjects. This plan contemplates also, as shown in the accompanying diagram (fig. 42), that all specialists working on a common subject will be grouped together regardless of the kind of service performed.

The powers and functions of the several officers provided for in this plan may be stated briefly as follows:

- (1) The heads of the several subject-matter departments act mainly as chairmen of their respective groups. They, in consultation with the other members of the group concerned, initiate projects and recommend them to their respective deans.

- (2) The several deans serve as coordinating officers between the several departments within their respective divisions. The projects

initiated in their respective divisions, after proper coordination and after being approved by the president, are transmitted to the director of the administrative division concerned with the project in question.

SUGGESTED PLAN OF ORGANIZATION FOR ALABAMA POLYTECHNIC INSTITUTE

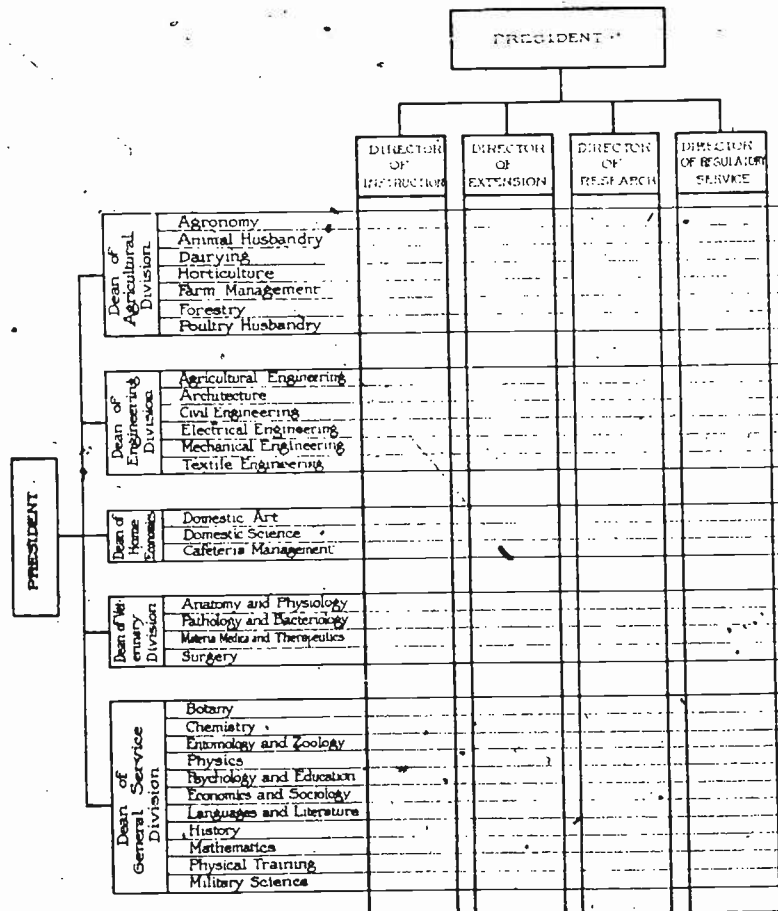


FIG. 42.

(3) The director of instruction, in consultation with the deans, the heads of the departments, and the individuals concerned, outlines the several curricula offered by the institution. He also provides for efficiency in teaching in so far as it is possible for an administrative officer to do so.

(4) The director of extension teaching, in consultation with the deans, the heads of departments, and the several specialists concerned,

approves all projects concerning extension and develops them into the general extension program.

(5) The director of research, in consultation with the deans, the heads of departments, and the specialists concerned, approves all research projects and develops them into the general research program.

(6) The director of the regulatory service is responsible for carrying out the provisions of the laws concerning the various forms of regulatory work assigned to the institution.

(7) The president is the coordinating officer for both subject matter and administration. He employs all specialists on the recommendation of the directors and deans concerned.

The four directors have no authority over subject matter. In like manner the deans and the heads of the several departments have no authority over either of the four administrative programs.

Two or more offices may appropriately be combined, but in such cases the functions should be kept distinct. The office of president, for example, may be combined with that of director of the regulatory service; the director of research may serve as head of one of the departments; the head of one of the departments may serve as director of instruction; or the dean of the division of agriculture may serve as head of one of the agricultural departments. There are certain combinations, however, that are not advisable, as, for example, the combining of the office of extension director with any other office. The character and magnitude of the duties of such office demand the full attention of one man.

6. The "school of agricultural education" at the Alabama Polytechnic Institute should be regarded as a department in the general service division. The general courses in education may be given by this department, and the work in special methods should be given in the respective subject-matter departments. The responsibility for the coordination of the teacher-training curricula, as with other curricula, rests with the director of instruction, provided for under the preceding recommendation.

THE FACULTIES.

1. TRAINING AND EXPERIENCE OF FACULTY MEMBERS.

In view of the many factors involved it is difficult to estimate, even roughly, the quality of instruction provided by the higher institutions. For obvious reasons no attempt was made to compare the teaching methods of faculty members. The only available evidence bearing upon the subject is that which pertains to the professional preparation, the experience in college teaching, and the professional activities and achievements of the individual faculty members.

The university.—The following table, prepared under the direction of the president, shows the academic training, the experience

in college teaching, and the publications of the several members of the university faculty:

TABLE 66.—Training, experience, and publications of the teaching staff of the university.

Title.	Department.	Academic training.		College teaching.			Publications last two years.	
		Highest degree.	Institution.	Years at the university.	Years elsewhere.	Total.	Research.	Nonresearch.
Professor and university dean.	English.	Ph. D.	Harvard.	20	7	27	0	0
Professor and dean.	Education.	A. M.	Columbia.	12	8	20	0	2
Do.	Civil engineering.	C. E.	Cornell.	12	8	20	0	0
Do.	Law.	A. M.	do.	15	22	37	0	0
Professor emeritus.	Geology.	Ph. D.	Heidelberg.	41	0	41	0	6
Professor.	History.	A. M.	Alabama.	46	0	46	0	0
Do.	Biology.	Ph. D.	Munich.	22	0	22	0	0
Do.	Latin.	Ph. D.	Johns Hopkins.	20	1	21	0	0
Do.	Romance languages.	Ph. D.	do.	20	0	20	0	1
Do.	German.	A. M.	Alabama.	17	5	22	0	0
Do.	Physics and electrical engineering.	E. E.	Case.	1	4	5	1	0
Professor and treasurer.	Engineering.	C. E.	Alabama.	8	0	8	0	0
Professor.	Geology.	Ph. D.	Johns Hopkins.	13	0	13	6	8
Do.	Secondary education.	A. M.	Michigan.	7	5	12	1	3
Do.	Economics.	A. M.	Virginia.	6	5	11	1	0
Do.	Philosophy.	A. B.	Southwestern.	1	11	12	0	2
Do.	Law.	J. D.	Michigan.	6	2	8	0	0
Do.	Mathematics.	Ph. D.	Harvard.	2	7	9	2	0
Do.	Mechanical engineering.	M. E.	Virginia.	7	4	11	0	0
Do.	Chemistry and metallurgy.	Ph. D.	Chicago.	10	3	13	0	6
Do.	Vocational education.	B. S.	Columbia.	1	14	15	0	3
Associate professor.	Chemistry.	Ph. D.	Virginia.	8	8	16	2	2
Do.	English.	A. M.	Harvard.	15	0	15	0	0
Assistant professor.	Romance languages.	Ph. D.	do.	3	1	4	0	0
Do.	Mathematics.	A. B.	Alabama.	5	0	5	0	0
Do.	Physics.	B. S.	do.	4	4	8	0	0
Adjunct professor.	English.	A. M.	Columbia.	2	2	4	0	2
Associate professor.	Greek and Latin.	Ph. D.	Munich.	13	0	13	0	0
Instructor.	Home economics.	A. B.	Indiana.	1	0	1	0	0

¹ School of medicine excluded.

TABLE 67.—Summary of data concerning training, experience, and publications of the teaching staff of the university.

Rank.	Total number.	Highest degree held.		College teaching experience in years.									Publications during last two years.			
		Bachelor.	Master.	Doctor.	1-5.	6-10.	11-15.	16-20.	21-25.	Over 25.	Average.		Number of contributions.		Number of contributors.	
													Research.	Nonresearch.	Research.	Nonresearch.
Professors.	21	2	10	9	1	3	8	2	4	3	17.7		10	31	5	8
Assistant and associate professors.	7	2	2	3	4	0	2	1	0	0	8.7		2	4	1	2
Instructors.	1	1	0	0	1	0	0	0	0	0	1.0		0	0	0	0
Total.	29	5	12	12	6	3	10	3	4	3	15.0		12	35	6	10

From the data presented here the following deductions may be made:

1. Out of a total of 29 members of the teaching staff 28 are of professional rank and 21 of these are full professors. There is a conspicuous lack of balance between the number of men of high and of low rank. The explanation for this is probably found in the inadequacy of financial support, which has made it necessary for the university to maintain a large number of departments with but one member and to depend upon advanced students for assistance in laboratory and outside work. Undoubtedly this has been the most prudent procedure under the circumstances, but such practice can not fail to affect seriously the quality of instruction. The detrimental effects are felt not only in the generally inferior type of service rendered by student assistants, but more particularly in the necessity for organizing classes into large sections.

2. A large proportion, 82 per cent, of the instructing staff have received professional preparation equivalent to that represented by a master's degree, and 41 per cent have received the equivalent of a doctor's degree. It is of interest to note also that a large proportion of the instructors have received their degrees from institutions other than that with which they are now connected.

3. The instructing staff is composed mainly of men who have had much experience in college teaching. The average amount per person is 15 years, and excluding those below the rank of professor it is nearly 18 years. The experience in college teaching of 10 members of the staff is limited to that at the University of Alabama.

4. Only 13 members of the teaching faculty have made professional contributions during the past two years, and the contributions of only 6 represent the result of research. The total contribution of all members during the period amounts to 41 publications, of which 12 represent the product of research. Only 11 members of the faculty out of 29 have made any research contribution since entering upon their career. In view of the heavy loads carried by the faculty members it is not surprising that they have not been more active in research and more conspicuous in productive scholarship.

The Polytechnic Institute.—The following table, prepared under the direction of the president, shows the training, experience in college teaching, and number of publications of the teaching staff.

TABLE 68.—Training, experience, and publications of the teaching staff of the Polytechnic Institute.

Title.	Department.	Academic training.		College teaching.			Publications in past two years.	
		Highest degree.	Institution.	Years at Alabama Polytechnic Institute.	Years elsewhere.	Total years in college teaching.	Research publications.	Other publications.
Professor and dean.....	Latin and history...	Ph. D.	Johns Hopkins..	30	3	30	0	1
Do.....	Chemistry.....	M. S.	Alabama Polytechnic Institute.	25	7	32	3	0
Do.....	Mechanical engineering.	M. E.	Purdue.....	31	2	31	0	0
Do.....	Veterinary medicine.	D. V. M.	Iowa State.....	27	3	30	1	4
Professor and director.....	Agronomy.....	M. S.	Miss. A. & M.....	23	4	27	0	6
Professor.....	Electrical engineering.	M. E.	Alabama Polytechnic Institute.	20	5	25	0	1
Do.....	Mathematics.....	M. E.	do.....	26	1	27	0	0
Do.....	Entomology and zoology.	Ph. D.	Massachusetts Agricultural College.	11	0	11	1	0
Do.....	Machine design and drawing.	M. E.	Alabama Polytechnic Institute.	22	0	24	7	3
Do.....	Physical chemistry.	M. A.	Michigan.....	26	1	27	0	0
Professor and manager.....	Electrical engineering and power plant.	E. & M. E.	Alabama Polytechnic Institute.	19	0	19	1	0
Professor.....	Mathematics.....	Ph. D.	Johns Hopkins..	9	4	13	0	0
Do.....	Physical training and mathematics.	A. B.	Yale.....	15	0	15	0	0
Do.....	English.....	M. S.	Alabama Polytechnic Institute.	15	0	15	0	5
Do.....	Animal husbandry.	B. S.	Missouri.....	5	2	7	3	1
Do.....	Pharmacy.....	B. S.	Michigan.....	6	6	12	2	0
Do.....	Qualitative chemistry.	M. S.	Alabama Polytechnic Institute.	15	0	15	0	0
Professor and registrar.....	Mathematics and administration.	C. E.	do.....	12	0	12	0	0
Professor.....	Agronomy.....	M. S.	Wisconsin.....	10	0	12	2	0
Professor and director.....	Agricultural education and summer session.	M. A.	(Completed work Ph. D. Columbia).	4	2	6	0	0
Professor.....	Architecture.....	M. S.	Ishigh.....	3	10	13	0	0
Do.....	Horticulture.....	B. Agr.	West Va.....	2	6	8	0	9
Do.....	Botany.....	Ph. D.	Chicago.....	2	3	5	0	0
Do.....	English.....	M. A.	Howard.....	3	0	3	0	0
Do.....	Research laboratory.	Ph. D.	Minnesota.....	16	4	20	3	0
Do.....	Civil engineering.....	A. M.	Union University.	1	10	11	2	2
Do.....	do.....	Ph. B.	Brown.....	1	0	1	1	0
Do.....	Agricultural education.	B. S.	Iowa State.....	1	5	6	0	0
Associate professor.....	Horticulture.....	B. S.	Virginia Polytechnic Institute.	10	3	13	1	11
Do.....	Machine design and drawing.	M. E.	Alabama Polytechnic Institute.	15	0	15	0	0
Assistant professor.....	Chemistry.....	M. S.	do.....	7	0	7	0	0
Do.....	Veterinary medicine.	M. D. V.	McKillop's Veterinary College.	12	2	14	0	0
Do.....	Mechanical engineering.	M. E.	Alabama Polytechnic Institute.	13	0	13	0	0
Do.....	Entomology and zoology.	M. A.	Ohio State.....	1	2	3	0	0
Do.....	Botany.....	A. M.	do.....	1	3	4	1	0

TABLE 68.—*Training experience, and publications of the teaching staff of the Polytechnic Institute.*

Title.	Department.	Academic training.		College teaching.			Publications in past two years.	
		Highest degree.	Institution.	Years at Alabama Polytechnic Institute.	Years elsewhere.	Total years in college teaching.	Research publications.	Other publications.
Instructor.....	Mechanical engineering and drawing.	M. E.....	Alabama Polytechnic Institute.	16	0	16	0	0
Do.....	Veterinary medicine.	D. V. M.	Chicago Veterinary College.	6	0	6	0	0
Do.....	History and Latin..	M. S.....	Alabama Polytechnic Institute.	6	0	6	0	0
Do.....	Chemistry.....	M. S.....	do.....	5	0	5	0	0
Do.....	Veterinary medicine.	D. V. M.	do.....	3	0	3	0	0
Do.....	do.....	D. V. M.	do.....	2	0	2	0	0
Do.....	History and Latin..	M. A.....	Chicago.	4	0	4	1	0
Do.....	Animal husbandry..	B. S.....	Alabama Polytechnic Institute.	1	0	1	0	0
Do.....	Mathematics, Spanish, and drawing.	M. E.....	do.....	3	0	3	0	0

TABLE 69.—*Summary of data concerning training, experience, and publications of the teaching staff of the Polytechnic Institute.*

Rank.	Total number.	Highest degrees held.			College teaching experience in years.								Publications during last two years.			
		Bachelor.	Master.	Doctor.	1-5	6-10	11-15	16-20	21-25	Over 25.	Average.		Number of contributions.		Number of contributors.	
													Research.	Non-research.	Research.	Non-research.
Professors.....	28	7	16	5	5	5	9	2	2	7	16.1		26	32	11	9
Assistant and associate professors.....	7	1	6	0	2	1	4	0	0	0	9.7		2	11	2	1
Instructors.....	9	4	5	0	6	2	0	1	0	0	5.1		1	0	1	0
Total.....	44	12	27	5	11	8	13	3	2	7	12.8		29	43	14	10

From the above tables the following deductions may be drawn:

1. A relatively large proportion, 35 out of 44, of the members of the teaching staff are of professional rank and 28 of these are of the rank of full professor. This condition is similar to that in the university and may be attributed to the same cause—inadequate support. At this institution, however, some men are employed with the rank of instructor. Here again a larger number of student assistants are employed to make up for the inadequate supply of full-time instructors.

2. Of a total of 44 instructors, 32 have received professional training sufficient to give them a master's degree or its equivalent. Five of these have received a doctor's degree.

3. Forty-three per cent of the instructors have received their highest degree from the institution with which they are now engaged. Even among the instructors of professional rank 34 per cent have received their highest degree from the Polytechnic Institute. This condition is an indication of a tendency toward educational inbreeding. Additional evidence of this tendency is found in the fact that nearly half of the instructing staff have had no college teaching experience other than that obtained at the Polytechnic Institute.

4. On the whole the members of the teaching staff have abundant teaching experience, averaging nearly 13 years. The average for the full professors is over 16 years. A conspicuous feature of the faculty of this institution is the long tenure of office of many of its members. Ten members, including the president, have been connected with the institution for more than 20 years, and over half of them have held their positions for more than 10 years.

5. During the past two years the activity of the faculty in productive scholarships, as measured by their publications, has not been conspicuous, although professional contributions have been made by 19 members of whom 14 have made research contributions. In view of the amount of teaching and other duties required, this may be regarded as a good showing, but there is a conspicuous lack of activity in this direction among several important departments.

The Girls' Technical Institute.—The following table contains data concerning the training, experience, and publications of the Girls' Technical Institute:

TABLE 70.—Summary of data concerning training, experience, and publications of the teaching staff of the Girls' Technical Institute.

Rank.	Total number.	Highest degrees held.				College teaching experience in years.					Publications during last two years.			
		None.	Bachelor.	Master.	Doctor.	1-5	6-10	11-15	Over 15.	Average.	Number of contributions.		Number of contributors.	
											Research.	Non-research.	Research.	Non-research.
Professors.....	13	5	6	2	0	3	5	4	1	9.0	0	0	0	0
Assistant and associate professors.....	25	13	7	2	0	17	2	3	0	3.8	0	0	0	0
Instructors.....	2	1	1	0	0	2	0	0	0	1.0	0	0	0	0
Total.....	37	19	14	4	0	22	7	7	1	5.5	0	0	0	0

From the above tables it is clear that the faculty of the girls' technical institute comprises many individuals who are conspicuously

lacking in training and experience. There are a number of notable exceptions, however, and there are a few individuals whose qualifications probably are much stronger than the tabulated statement seems to indicate. From the evidence the survey committee has been able to secure there is every reason to believe that the institution is meeting its obligations in a fitting manner. Despite the apparent deficiency in academic training on the part of several members of the faculty, the qualifications of the teaching staff fairly meet the requirements of a technical institute. In this respect, however, there is little to commend the present movement toward the creation of a standard college with four years of collegiate work.

2. THE WORK OF THE FACULTY MEMBERS.

On account of the variable service performed by faculty members it is difficult to establish any just basis upon which to measure their work. The duties of some may be limited mainly to those rendered in classroom and laboratory, while those of others may include such activities as service on committees, consultation with students, administration, and extension teaching. Furthermore, there is great variation in the activity of faculty members concerning productive scholarship and professional improvement. In the time at the disposal of the survey committee it has seemed impracticable to attempt the collection of evidence bearing upon the nonteaching duties of faculty members.

The measurement of the actual amount of time devoted to classroom or laboratory work is not so difficult, but here again many variable factors present themselves and complicate comparisons. The energy and time required of the several instructors in connection with the work of instruction differ in many ways, more particularly in (a) the number of students under instruction, (b) the character and amount of preparation necessary for each class or section, and (c) the labor entailed in the correction of papers, themes, reports, etc. It is obvious, therefore, that no single measure can give a fair and complete indication of the services rendered by the various instructors.

In measuring the instructional work of faculty members two methods may be employed. One of these consists in the use of the number of hours spent by the instructor in the classroom or laboratory, assuming that two hours of work in the laboratory are approximately equivalent to one hour in the classroom. Such a unit of measurement is essentially the same as the credit-hour commonly employed by colleges. This basis of measurement is faulty, for the reason that it does not take into consideration the variable amount of outside labor required for classes of different sizes.

The second method available for the measurement of instructors' teaching loads is that which has come to be known as the "student clock-hour method." The unit of measurement in this method is the student clock hour, which is the instruction of one student during one 50-minute period per week for one semester in either classroom or laboratory. The instructional load represented by any course therefore may be determined by multiplying the number of students taking the course by the number of 50-minute periods in which the instruction is given. The teaching load carried by any instructor is determined by adding together the instructional loads of the several courses given. This basis of measurement although superior to the semester hour method, is not faultless. The chief defect is in the assumption that time spent in laboratory instruction is as burdensome as classroom instruction or that an instructor whose time is spent mainly in laboratory work is carrying as heavy a load as one who gives only classroom courses. It is defective also in that it does not take into consideration the difference in courses with regard to the nerve energy required or to the amount of outside preparation needed.

The use of either one of these methods by itself might lead to grossly distorted estimates of the services performed by different instructors. Either may be used to support the other and both in actual practice may well be supplemented by the addition of all available information concerning nonteaching service. Figures concerning both methods have been collected, but since such a large proportion of the instructors, especially those at the Polytechnic Institute, divide their time between two or more kinds of service, comparison is impracticable. From the information at hand, however, certain general deductions concerning teaching loads may be made:

The university.—(1) The average number of semester hours carried by instructors is approximately 15, but the teaching load of many individuals exceeds this by three or four hours. This represents a much heavier teaching load than is carried by the instructors of similar institutions.

(2) The average number of student clock hours per week carried by instructors is 372. This is a somewhat heavier burden than that carried by instructors of other institutions and yet it does not represent the conditions to be as serious as they really are. The average load in many departments exceeds 600 student clock hours per week. The average is brought down by certain low-average departments. For example, the average for the engineering departments for the year 1916-17 is 261 student clock hours. This may be accounted for in the large number of small classes in engineering, as shown under another head. It is apparent therefore that there is great variation in teaching loads as represented by student clock hours.

(3) If the university expects its faculty members to carry on research work, as all university men should, and to keep professionally alert, it must provide relief from the heavy teaching burdens under which most of its instructors are serving.

The Polytechnic Institute.—(1) Of a total of 44 members of the faculty, 32 have duties other than teaching. As pointed out in another section, many devote their time to two, three, or four kinds of service and receive their remuneration from various funds. Under such conditions it is difficult to compare teaching loads, and with a more accurate knowledge of the nonteaching activities it is difficult to make comparisons of the total service rendered by the several faculty members.

(2) From the information available it is apparent that the instructors are carrying heavy teaching loads in proportion to the division of time allotted for teaching. Considering only the fractions of the time allotted for teaching the average teaching load for the whole institution is approximately 15 semester hours per week.

(3) In certain cases where the time of instructors is undivided the number of semester hours carried is conspicuously high. For examples, the average load of the professor of architecture is 31 hours per week; that of the assistant professor of mechanical engineering, 21 hours; the professor of pharmacy, 25 hours; the professor of mathematics, 20 hours; and the professor of mining engineering, 24 hours.

The Girls' Technical Institute.—(1) The teaching load of faculty members at this institution is not excessively high considering the fact that much of the instruction is of subcollegiate grade. The loads in the departments of mathematics and Roman languages are especially high. The average number of student clock hours carried per week is 300.

8. SIZE OF CLASS SECTIONS AT THE THREE HIGHER INSTITUTIONS.

As shown elsewhere, there is a direct relationship between the size of the class sections and the cost of instruction. In general the larger the sections the lower the cost, but there is a generally recognized limit to the size from the standpoint of efficiency of instruction. The limit varies, however, according to the nature of the instruction. In the case of a lecture course there is no limit within the range of the instructor's voice, but in recitations or quizzes the limit generally is believed to be in the neighborhood of 30 students, and in laboratory courses about half that number. In the higher institutions of Alabama the size of the sections run to extremes in numerous cases. On account of large enrollments and relatively small number of instructors, there has been a tendency at all three institutions to

offer a large number of lecture courses, some of which are given in classes of over 250 students. On the other hand, there are many sections enrolling very small numbers and these are responsible for raising the average cost of instruction. Obviously it is necessary to offer a certain number of courses for which there will be a limited demand, but few institutions can afford to offer such a large proportion of small enrollment courses as are given at the higher institutions of Alabama.

The university.—Table 71 shows the number of class sections with various enrollments at the university for the years 1916-17 and 1917-18:

TABLE 71.—Distribution of class sections at the University of Alabama according to the number of students registered in each, 1916-17 and 1917-18.¹

Size of sections.	1916-17				1917-18			
	First semester.	Second semester.	Both semesters.	Per cent.	First semester.	Second semester.	Both semesters.	Per cent.
1-5 students.....	24	21	45	18.3	5	5	10	5.4
6-10 students.....	11	18	29	11.8	9	15	24	12.9
11-20 students.....	20	18	38	15.1	12	26	47	25.1
21-30 students.....	10	13	23	9.4	11	14	25	13.3
31-40 students.....	12	20	32	13.1	11	16	27	14.4
41-50 students.....	10	11	21	10.2	12	9	21	11.2
51-60 students.....	12	12	24	9.8	6	5	11	5.9
61-70 students.....	2	4	6	2.5	2	2	4	2.3
Over 70 students.....	11	8	19	7.8	8	6	14	7.5
Total.....	121	125	246	100.0	89	98	187	100.0

¹ Exclusive of the medical school.

A condition almost as serious as that shown by the large number of small sections is that found in the practice of giving instruction in very large classes. The most serious condition in this respect is found in departments of biology, chemistry, English, history, economics, mathematics, and physics, all of which give instruction in classes of 100 students or over.

It will be observed that during the year 1916-17, before enrollments were affected by the war, the university conducted 45 classes with not more than 5 students and 74 classes with not more than 10 students. In other words, 30 per cent of the class sections enrolled not more than 10 students. Twenty-six out of 51 engineering courses given were given in classes of not more than 5 students and 38 in classes of not more than 10 students. In the 51 courses there was a gross registration of 434 students, or an average of 8.5 per course. A very large proportion of the small sections, therefore, are in engineering courses.

TABLE 72.—Distribution of class sections at the Alabama Polytechnic Institute according to the number of students registered in each, 1916-17 and 1917-18.

Size of sections.	Number of classes.									
	1916-17					1917-18				
	First term.	Second term.	Third term.	All terms.	Per cent of total.	First term.	Second term.	Third term.	All terms.	Per cent of total.
1-5 students.....	23	24	22	69	10.5	27	25	26	87	11.9
6-10 students.....	29	25	23	77	11.7	37	42	40	119	18.1
11-20 students.....	31	30	47	117	17.8	66	45	53	167	25.4
21-30 students.....	37	30	46	113	17.2	27	34	34	95	14.5
31-40 students.....	41	58	40	139	21.2	31	32	31	94	14.3
41-50 students.....	29	23	23	75	11.4	12	18	13	43	6.5
51-60 students.....	7	8	6	21	3.2	8	7	6	21	3.2
61-70 students.....	5	14	6	15	2.3	4	4	3	11	1.7
Over 70 students.....	11	11	9	31	4.7	10	11	8	29	4.4
Total.....	213	222	222	657	100.0	222	221	214	657	100.0

The Polytechnic Institute.—As shown in Table 72 the proportion of small sections at the Polytechnic Institute is somewhat smaller than at the university, but even here it is probably larger than it should be from the standpoint of economy. During the year 1916-17, 22 per cent of the classes were in sections of not more than 10. The smaller sections are distributed quite evenly among the several divisions. The most conspicuous department with respect to small sections is that of architecture in the division of engineering. The engineering division as a whole, however, shows that 59 sections out of a total of 126 failed to register more than 10 students. It should be noted that many of these small classes were composed of graduate students. Among the 126 classes in engineering there was a gross registration of 3,914, or an average of 31 students per section.

The most serious condition at this institution with regard to the size of sections is the number of sections with large registrations. For the year 1916-17 there were 31 sections each with over 70 students, and in 1917-18 there were 29 such sections. In several departments courses were given in classes of over 100 students.

The Girls' Technical Institute.—Table 73 shows the number of the classes with various registrations at the Girls' Technical Institute for the year 1918-19.

TABLE 73.—Distribution of the number of class sections at the Alabama Girls' Technical Institute for the year 1918-19.

Size of sections.	Number throughout the year.	Per cent of total.	Size of sections.	Number throughout the year.	Per cent of total.
1-5.....	20	14.6	41-50.....	10	7.2
6-10.....	22	15.9	51-60.....	2	1.3
11-20.....	40	29.1	Over 60.....		
21-30.....	28	18.7	Total.....	138	100.0
31-40.....	18	13.0			

Since the courses run through the whole session, it is necessary in making comparisons with the other institutions to multiply the number of sections by two in the case of the university and by three in the case of the Polytechnic Institute. The total number of sections here shown, however, may be compared with a single term of either of the other institutions. Of a total of 138 sections 42, or 30 per cent, represent registrations of not more than 10 students.

IV. COURSES OFFERED AND COURSES GIVEN.

It is customary among colleges and universities to offer several courses which are seldom or never given. Such a practice is justified if the offerings represent a conscientious attempt to anticipate the needs of students, and if the institution is in a position to support adequately the courses that are in constant demand. It should be regarded as the duty of the State to support instruction in courses for which there is a general demand and at the same time to provide for legitimate expansion in anticipation of the needs. The conditions with regard to the number of courses offered and the number given at the three higher institutions are shown in the following tabulated statement:

TABLE 74.—*Courses offered and courses given at the three higher institutions in Alabama for the year 1917-18.*

Departments.	University. ¹			Polytechnic Institute.			Girls' Technical Institute.		
	Courses offered.	Courses given.	Courses not given.	Courses offered.	Courses given.	Courses not given.	Courses offered.	Courses given.	Courses not given.
Biology.....	6	4	2	11	7	4	8	7	1
Chemistry.....	16	11	5	20	15	5	2	2	0
Economics.....	6	6	0	1	1	0			
English.....	16	16	0	27	10	17	6	4	2
Geology.....	6	5	1	9	7	2			
German.....	3	2	1	9	6	3			
Greek.....	4	1	3						
History.....	6	6	0	10	9	1	12	7	5
Latin.....	7	4	3	5	3	2	6	4	2
Mathematics.....	12	9	3	8	5	3	13	6	7
Physics.....	8	2	6	5	3	2	1	1	0
Political science.....	3	3	0						
Romance languages.....	5	5	0	9	7	2	5	5	0
Home economics.....	5	2	3				25	23	2
Education and psychology.....	19	11	8	39	12	27	10	7	3
Philosophy.....	3	2	1						
Civil engineering.....	15	5	10	21	16	5			
Drawing.....	7	6	1	15	12	3			
Electrical engineering.....	6	2	4	22	20	2			
Mechanical engineering.....	15	5	10	28	27	1			
Mining engineering.....	7	0	7	8	6	2			
Law.....	23	20	3						
Sociology.....							4	4	0
Commercial.....							8	7	1
Art.....							4	4	0
Music.....							21	10	11
Architecture.....				23	17	6			
Agronomy.....				13	11	2			
Agricultural engineering.....				8	1	2			
Horticulture.....				10	9	1			
Animal husbandry.....				14	13	1			
Pharmacy.....	2	2	0	14	13	1			
Veterinary medicine.....				25	24	1			
Total.....	200	129	71	249	254	95	125	91	34

¹ Courses in medicine not included.

The data presented in the above table may be summarized as follows:

Institution.	Courses offered.	Courses given.	Courses not given.	Percentage of courses not given.
University.....	200	129	71	35.5
Polytechnic Institute.....	349	254	95	27.2
Girls' Technical Institute.....	125	91	34	27.2
All institutions.....	674	474	200	29.7

Thus it appears that nearly 30 per cent of the courses offered by the three higher institutions in 1917-18 were not given. The proportion not given by the university amounts to 35.5 per cent and for each of the other two institutions 27.2 per cent. The failure to give some of these courses was probably due to the shrinkage of enrollment following the outbreak of the war. The figures for the university do not include many courses listed but not offered for the year under consideration.

The committee commends the practice of the university in offering certain of the less popular courses in alternate years. The practice might well be extended to include many of the small enrollment courses now offered every year. The other institutions also would do well to adopt the practice for many of their less popular courses.

V. SALARIES OF FACULTY MEMBERS.

Quality of instruction is the chief factor in determining the success of any educational institution, and quality of instruction is dependent to a very large extent upon the salaries paid instructors. It is true that institutional attachment and other special considerations frequently hold instructors at lower salaries than they may obtain elsewhere, but the fact remains that teaching ability generally is subject to the law of supply and demand.

In only six States is the maximum salary of State university professors so low as that of the University of Alabama, which at present is \$2,400 per year. Thirty-three State universities maintain a maximum in excess of this amount and among these the maximum ranges as high as \$6,000. The conditions in the Polytechnic Institute, in comparison with other land-grant colleges, are similar to those prevailing at the university. In only five such institutions is the maximum salary so low, while in 26 cases a higher maximum is in force.

The maximum salary for deans in the university is \$3,200 and in the Polytechnic Institute \$3,000. Forty State-supported colleges and universities maintain a maximum salary for deans in excess of the larger figure offered by Alabama.

The university and Polytechnic Institute have been fortunate in retaining in service for many years a large proportion of their instructors. The Girls' Technical Institute, however, has not been so fortunate and the salary problem at the institution has reached a critical stage. The average annual salary there is barely more than \$1,000; and, since it is a younger institution, it has not yet surrounded itself, as have the other institutions, with a large group of professors whose attachments to it are deep rooted. The fact that out of 36 faculty members listed in the 1917-18 catalogue only 19 are now connected with the institution is ample proof that the salary scale must be promptly raised if present standards are to be maintained.

The spirit of attachment and devotion is remarkably strong in the university and the Polytechnic Institute and it is a noteworthy fact that many of the instructors are serving at salaries much lower than could be obtained elsewhere. Solely from the viewpoint of justice to the individuals involved the State should be more liberal in the matter of salaries, but the State's chief concern is after all the maintenance of a sound educational policy. For this reason it must face the problem with a full realization that the law of supply and demand makes it necessary to pay salaries approximately equal to those of similar institutions in other States. No institution can depend indefinitely upon the spirit of devotion to maintain its standards of efficiency. New men must be employed to fill vacancies and to provide for developments, and men of the best qualifications are not easily attracted to institutions with low salary scales. The raising of salaries, therefore, should not be regarded by the State as disinterested benevolence to college instructors, but rather as a service to itself in the interests of efficiency.

VI. STANDARDS OF COLLEGE ENTRANCE REQUIREMENTS.

A characteristic feature of college admission standards in Alabama until recent years has been the lack of a well regulated scheme of articulation between the high schools and the State's higher institutions. For many years a dual standard of entrance requirements has existed, caused largely by the rivalry of the State University and the Polytechnic Institute. This rivalry has partially disappeared as a result of the establishment of the Association of Alabama Colleges, which includes, besides the university, nearly all of the leading privately endowed colleges of the State. This association, by a wise policy of affiliation with a large but selected group of State-inspected public high schools, has raised the State standard of college entrance requirements. The requirements now imposed by the members of the association coincide with those prescribed by the Association of Colleges and Secondary Schools of the Southern States.

The indirect result has been the raising of entrance standards at the Alabama Polytechnic Institute, whose requirements for entrance to regular collegiate work are now essentially on a par with those of the university. Nevertheless, the past policy of the Alabama Polytechnic Institute with respect to entrance standards and its present refusal to join the college association have subjected it to criticism, just or unjust, throughout the entire State.

The committee recognizes that the institute as a land-grant college is under obligations to admit a comparatively large group of students to special or noncollegiate courses, on a lower basis of entrance standards than is required for collegiate work. But the institute should so safeguard the entrance from these courses to the regular college courses that it may be under no suspicion of laxness in administering its collegiate standards. It should also so classify its students as to make their actual status unmistakably plain.

The committee urges that all State higher institutions come together on a common platform of college entrance standards such as that of the Alabama Association of Colleges. There is no excuse for even the appearance of a dual system of entrance requirements in the State of Alabama. As long as the present uncertainty as to the position of the Alabama Polytechnic Institute exists, the weaker high schools of the State will readily find an excuse for not reaching the standards agreed to by the leading higher institutions.

Another important aspect of this problem relates to the possibility of entrance to both institutions on 12 units of high school work. As long as students leave four-year high schools the year before graduation and enter directly upon their college work at a State institution it will be difficult for the local high schools to obtain the support necessary to maintain standards required in the fourth year. The State institutions of higher learning are competing with the fourth year of the high school.

From Table 75 it is evident that it is time for a more concerted action on the part of all institutions within the State, both public and private, in insisting that this type of student should remain at the four-year high school until he has completed at least 14 units.

Out of 341 students admitted to the University of Alabama in 1916-17, 15, or 4.3 per cent, were admitted with 12 units of preparation from standard four-year high schools of the State. The university also received seven students with 12 units from standard three-year high schools, or 1.7 per cent, making a total of 22 students admitted with 12 units, or about 6 per cent of the total number of entrants. Some of the endowed private institutions of the State unfortunately have accepted much larger numbers of 12-unit students from standard four-year high schools, as shown by the figures

of the Birmingham College and the Athens College for Young Women. Out of 301 students admitted to the Alabama Polytechnic Institute in 1916-17, 23, or 7 per cent, were admitted with 12 units of preparation from four-year high schools; 9 students, approximately 3 per cent, were admitted from three-year high schools, making a total of about 10 per cent of the entire enrollment for 1916-17.

It is likely that the disturbed conditions brought about by the war account for the larger percentage of 12-unit students admitted by both institutions in 1917-18.

TABLE 75.—Number of students entering college with 12 units from 3 year and 4 year high schools; including institutions of Alabama Association of Colleges, and Alabama Polytechnic Institute.

1916-17.							
Institution.	Total number admitted.	Admitted with 12 units from standard 4-year high school.	Per cent.	Admitted with 12 units from standard 3-year high school.	Per cent.	Total admitted with 12 units.	Per cent.
Athens College for Young Women.....	22	4	18.1	2	10.0	6	28.0
Birmingham College.....	50	17	34.0	1	2.0	18	36.0
Howard College.....	86	8	9.3	3	3.5	11	12.0
Judson College.....	57	0	0	3	5.2	3	5.2
Southern University.....	51	3	5.8	0	0	3	5.8
Women's College of Alabama.....	113	5	4.4	3	2.6	8	7.0
UNIVERSITY OF ALABAMA.....	341	15	4.3	7	2.0	22	6.0
ALABAMA POLYTECHNIC INSTITUTE.....	301	23	7.0	9	2.9	32	10.0
Total.....	1,021	75	7.3	28	3.0	103	10.0
1917-18.							
Athens College for Young Women.....	24	1	4.1	1	4.1	2	8.0
Birmingham College.....	28	7	25.0	1	3.6	8	28.0
Howard College.....	63	8	12.6	0	0	8	12.0
Judson College.....	59	0	0	1	1.7	1	1.7
Southern University.....	35	3	8.5	0	0	3	9.0
Women's College of Alabama.....	47	0	12.0	0	0	0	13.0
UNIVERSITY OF ALABAMA.....	409	11	2.8	19	5.6	30	7.0
ALABAMA POLYTECHNIC INSTITUTE.....	298	32	11.0	8	2.7	40	13.0
Total.....	963	68	7.0	30	3.0	98	10.0

Some aspects of collegiate standards.—The study of the duplication of curricula in the two leading State higher institutions necessarily involves an investigation of the alleged competition between the bachelor of arts and the bachelor of science curricula of the State University and the bachelor of science curriculum—the general course—at the Alabama Polytechnic Institute. A careful study of the accompanying graphs shows that the alleged competition between these curricula is largely imaginary.

The A. B. and B. S. curricula at the university compare favorably in general content and quality with similar curricula in the leading

higher institutions of the United States, it being clearly understood that the aims of these curricula are purely cultural.

The B. S. (general course) at Auburn is a curriculum *sui-generis*. It approaches more nearly in content and quantity to the typical en-

UNIVERSITY OF ALABAMA COLLEGE OF ARTS AND SCIENCES BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements										Per Cent of Time in Years
Subject	Units	Per Cent of Time	40	40	40	40	40	40	40	Per Cent of Time	Units	Per Cent of Time	40	40	40	40	40	40	40	
Mathematics	3	21.43								10.50	12	10.50								5.00
Languages	3	21.43								15.33	16	15.33								6.67
English	3	21.43								5.00	6	5.00								13.81
Prescribed	9	64.29								20.00	24	20.00								29.71
Elective	5	35.71								10.00	12	10.00								15.71
Total	14	100								58.33	70	58.33								61.50
										41.67	50	41.67								38.50
										100	120	100								100

COLLEGE OF ENGINEERING BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

										44.50	66	44.50								22.20
										8.70	13	8.70								4.40
Mathematics	3	21.43								16.10	24	16.10								8.00
English	3	21.43								16.80	25	16.80								19.10
Prescribed	6	42.86								4.00	6	4.00								12.70
Elective	8	57.14								89.90	134	89.90								66.60
Total	14	100								10.01	15	10.01								39.60
										100	149	100								100

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

										39.70	58	39.70								19.80
										8.90	13	8.90								4.50
Mathematics	3	21.43								20.60	30	20.60								10.30
English	3	21.43								17.10	25	17.10								19.30
Prescribed	6	42.86								4.10	6	4.10								12.70
Elective	8	57.14								20.40	132	20.40								66.66
Total	14	100								9.60	14	9.60								33.34
										100	146	100								100

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

										43.50	67.5	43.50								22.80
										8.80	13	8.80								4.40
Mathematics	3	21.43								17.50	26	17.50								8.70
English	3	21.43								16.80	25	16.80								19.10
Prescribed	6	42.86								4.00	6	4.00								12.70
Elective	8	57.14								32.60	137.5	32.60								67.70
Total	14	100								7.40	11.0	7.40								32.30
										100	148.5	100								100

FIG. 43.

gineering course, except that it exceeds the average engineering course by at least 40 semester hours in total requirements, and likewise exceeds the A. B. and B. S. requirement in most universities by at least 60 semester hours. Aside from the work in history, the curriculum combines strongly professionalized courses in science with

large opportunities for election of subjects in the applied sciences such as agriculture and engineering.

The courses in engineering.—The committee has discovered evidence of the existence of the opinion that the courses or the curricula in engineering in the land-grant colleges are not of the same char-

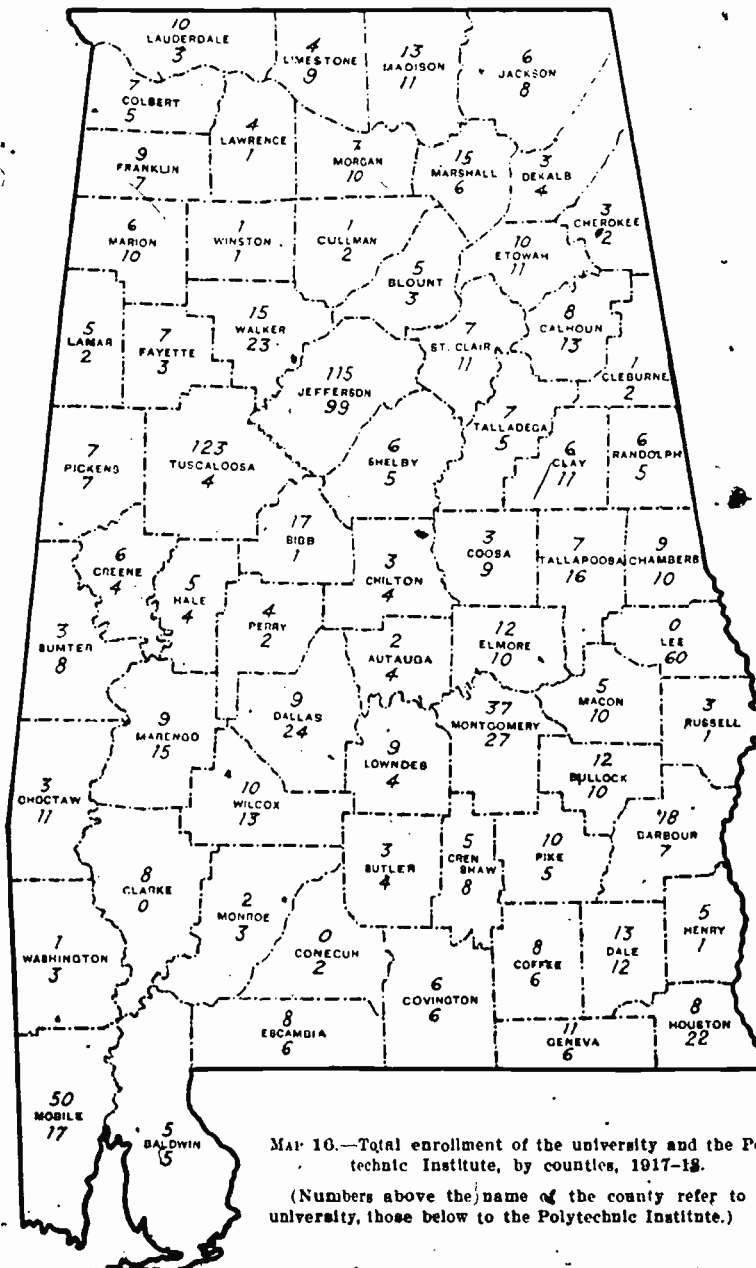
ALABAMA POLYTECHNIC INSTITUTE BACHELOR OF SCIENCE-GENERAL COURSE

Entrance Requirements					Graduation Requirements										Percent of Time in Years
Subject	Units	Percent of Time	20	40	60	80	0	20	40	60	80	Percent of Time	Subject	Units	
												3.30	6	Philos & Psychol	1.65
												3.30	6	Social Science	1.65
												22.00	41	Science	11.00
History	1	7.15										4.00	7	History	5.57
Mathematics	3.5	25.00										5.40	10	Mathematics	15.20
English	3	21.45										9.00	16	Language	4.50
Prescribed	7.5	53.60										6.60	12	English	18.02
Elective	6.5	46.40										53.90	99	Prescribed	53.75
Total	14.0	100.00										46.10	86	Elective	46.25
												100.00	184	Total	100.
BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING															
												53.40	97	Engineering	26.70
												12.10	22	Science	6.50
History	1	7.15										3.70	6	History	5.45
Mathematics	3.5	25.00										16.50	30	Mathematics	20.75
English	3	21.45										8.80	16	English	15.17
Prescribed	7.5	53.60										94.50	172	Prescribed	74.05
Elective	6.5	46.40										5.50	10	Elective	25.95
Total	14.0	100.00										100.00	182	Total	100.
BACHELOR OF SCIENCE IN CIVIL ENGINEERING															
												47.50	86	Engineering	24.20
												11.70	20	Science	6.50
History	1	7.15										3.70	6	History	5.45
Mathematics	3.5	25.00										16.70	30	Mathematics	20.85
English	3	21.45										8.9	16	English	15.17
Prescribed	7.5	53.60										89.80	159	Prescribed	71.20
Elective	6.5	46.40										11.20	20	Elective	25.80
Total	14.0	100.00										100.00	179	Total	100.
BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING															
												54.90	102	Engineering	27.50
												11.70	22	Science	6.50
History	1	7.15										3.50	6	History	5.30
Mathematics	3.5	25.00										16.00	30	Mathematics	20.50
English	3	21.45										8.60	16	English	15.03
Prescribed	7.5	53.60										94.7	177	Prescribed	74.15
Elective	6.5	46.40										5.3	10	Elective	25.85
Total	14.0	100.00										100.00	187	Total	100.

FIG. 44.

acter as the courses and curricula in engineering in the State universities or in privately endowed institutions. This is an old superstition. Figures 43 and 44 clearly indicate that the degree curricula in engineering at Auburn are fundamentally equivalent in content and more than equivalent in quantity to the degree curricula in engineering at the university.

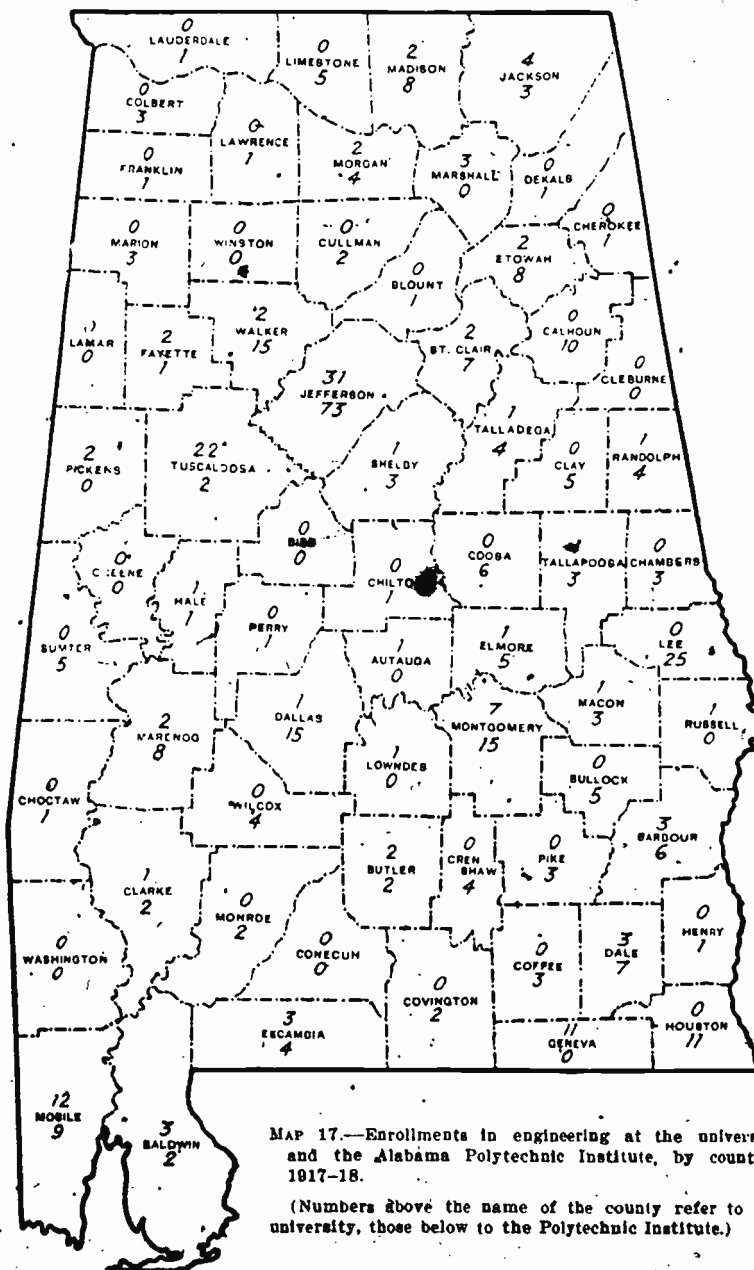
The reader's attention is called to the enrollments in Tuscaloosa, Jefferson, Dallas, Montgomery, Lee, and Mobile Counties.



MAR 10.—Total enrollment of the university and the Polytechnic Institute, by counties, 1917-18.

(Numbers above the name of the county refer to the university, those below to the Polytechnic Institute.)

Attention is called to the engineering enrollments in Tuscaloosa, Jefferson, Dallas, Montgomery, Lee, and Mobile Counties.



Chapter XXII.

STATE SUPPORT OF HIGHER EDUCATION.

COMPARISON OF ALABAMA WITH OTHER STATES.

In 1913, Alabama ranked twenty-third among the States with respect to the amount expended for higher education for each \$1,000 of wealth. The amount was 65 cents, according to Table 76. The following Southern States exceeded that figure: Tennessee spent 80 cents; Mississippi, 87 cents; North Carolina, 94 cents; South Carolina, \$1.21; and Virginia, \$1.30. The last-named State spent 110 per cent more than the corresponding expenditure made by Alabama.

TABLE 76.—Amount expended for higher education for each \$1,000 of wealth in order of rank, by States, 1913-14.

1. Delaware.....	\$3.88	26. Georgia.....	\$0.61
2. New Hampshire.....	1.84	27. Vermont.....	.60
3. Massachusetts.....	1.47	28. New Mexico.....	.60
4. Virginia.....	1.37	29. Ohio.....	.56
5. Wisconsin.....	1.27	30. Rhode Island.....	.56
6. Connecticut.....	1.25	31. Wyoming.....	.56
7. Arizona.....	1.23	32. Louisiana.....	.55
8. South Carolina.....	1.21	33. Pennsylvania.....	.54
9. Maryland.....	.96	34. Kansas.....	.53
10. North Carolina.....	.94	35. Iowa.....	.51
11. Maine.....	.92	36. Nebraska.....	.51
12. Mississippi.....	.87	37. Kentucky.....	.50
13. Tennessee.....	.80	38. Colorado.....	.50
14. Minnesota.....	.79	39. Texas.....	.49
15. New York.....	.74	40. Montana.....	.48
16. Michigan.....	.73	41. Nevada.....	.47
17. South Dakota.....	.72	42. Florida.....	.44
18. Idaho.....	.71	43. Indiana.....	.42
19. Utah.....	.70	44. Missouri.....	.42
20. California.....	.68	45. West Virginia.....	.39
21. Illinois.....	.68	46. New Jersey.....	.39
22. Oregon.....	.67	47. Arkansas.....	.30
23. ALABAMA.....	.65	48. Oklahoma.....	.19
24. Washington.....	.64		
25. North Dakota.....	.61		
		Average for United States.....	.78

The average expenditure of the 48 States of the Union was 78 cents for each \$1,000 of wealth. The average of the following group of

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Southern States—Virginia, South Carolina, North Carolina, Mississippi, Tennessee, Alabama, Georgia, Louisiana, Florida, and Texas—was 79 cents. Alabama suffers in both comparisons.

Per capita receipts of higher institutions.—According to Table 77, Alabama ranked forty-fourth among the States in 1913 with respect to the apportionment of the receipts of higher institutions per capita among the population. *Its higher institutions received 57 cents per capita of the population. Florida, Mississippi, Tennessee, Louisiana, North Carolina, Texas, South Carolina, and Virginia surpassed Alabama to the extent of from 5 to 155 per cent. The per capita apportionment in Virginia was \$1.45. Compared with the average apportionment of all the States in the Union—\$3.22, or the median, \$1.65—the showing of Alabama is very poor.

TABLE 77.—Rank of States as to per capita receipts of higher educational institutions, including normal schools, 1913-14.

1. Delaware.....	\$5.65	26. Wyoming.....	\$1.32
2. Arizona.....	2.64	27. Idaho.....	1.27
3. New Hampshire.....	2.62	28. Maine.....	1.27
4. Nevada.....	2.53	29. South Carolina.....	1.04
5. Massachusetts.....	2.51	30. Ohio.....	1.01
6. Connecticut.....	2.43	31. Pennsylvania.....	1.00
7. Wisconsin.....	2.33	32. Rhode Island.....	.93
8. California.....	2.30	33. New Mexico.....	.92
9. North Dakota.....	2.17	34. Texas.....	.83
10. Minnesota.....	1.99	35. New Jersey.....	.81
11. Oregon.....	1.83	36. Indiana.....	.77
12. New York.....	1.77	37. North Carolina.....	.75
13. Illinois.....	1.76	38. West Virginia.....	.71
14. Iowa.....	1.71	39. Missouri.....	.70
15. Washington.....	1.71	40. Louisiana.....	.68
16. South Dakota.....	1.64	41. Tennessee.....	.67
17. Nebraska.....	1.54	42. Mississippi.....	.63
18. Maryland.....	1.46	43. Florida.....	.60
19. Virginia.....	1.45	44. ALABAMA.....	.57
20. Montana.....	1.44	45. Georgia.....	.54
21. Colorado.....	1.43	46. Oklahoma.....	.51
22. Kansas.....	1.38	47. Kentucky.....	.47
23. Utah.....	1.38	48. Arkansas.....	.33
24. Vermont.....	1.35		
25. Michigan.....	1.35		
		Average for United States.....	3.22

The Bureau of Education is aware that the data upon which these observations are founded are somewhat antiquated. Later data just collected give fair evidence that similar tabulations for the year 1918, which are now in preparation, will vary but slightly from those here presented, leaving the State of Alabama in relatively the same position. The expenditures for all the higher institutions, public and private, within the several States are covered in the foregoing tables. The expenditures for normal schools are also included.

In Tables 78 and 79 which follow, similar data are presented with respect to the State collegiate institutions, excluding normal schools. These figures are for the year 1918.

TABLE 78.—Amount expended for State-supported higher education for each \$1,000 of wealth, by States, 1918, excluding normal schools.

1. Wyoming.....	\$0.82	26. Indiana.....	\$0.32
2. Arizona.....	.78	27. Texas.....	.32
3. Idaho.....	.74	28. Virginia.....	.31
4. New Mexico.....	.69	29. Maine.....	.29
5. Utah.....	.69	30. Iowa.....	.28
6. South Dakota.....	.56	31. North Carolina.....	.28
7. Michigan.....	.53	32. Ohio.....	.25
8. Montana.....	.53	33. Georgia.....	.22
9. Tennessee.....	.53	34. Kentucky.....	.22
10. Delaware.....	.51	35. North Dakota.....	.22
11. Vermont.....	.50	36. Oklahoma.....	.21
12. Wisconsin.....	.48	37. West Virginia.....	.20
13. New Hampshire.....	.46	38. ALABAMA.....	.17
14. Nevada.....	.43	39. Connecticut.....	.15
15. Colorado.....	.39	40. Illinois.....	.15
16. Minnesota.....	.38	41. Maryland.....	.15
17. Mississippi.....	.37	42. Missouri.....	.15
18. Oregon.....	.37	43. Arkansas.....	.14
19. South Carolina.....	.37	44. Rhode Island.....	.14
20. Massachusetts.....	.34	45. New York.....	.10
21. Florida.....	.33	46. New Jersey.....	.06
22. Kansas.....	.33	47. Pennsylvania.....	.06
23. Nebraska.....	.33	48. Louisiana.....	.05
24. Washington.....	.33		
25. California.....	.32	Average for United States.....	.36

According to Table 78, the position of Alabama is again exceedingly low. It ranks thirty-eighth. The expenditure for the university, the Polytechnic Institute, and Montevallo was only 17 cents for each \$1,000 of State wealth. Nine Southern States have exceeded this expenditure, conspicuous among them being Virginia with 31 cents; Mississippi, 37 cents; and Tennessee, 53 cents. If comparison be made with the leading States in other sections of the United States the position of Alabama suffers accordingly. It should be explained that one of the principal reasons for the relatively low position of Connecticut, Illinois, Maryland, Rhode Island, New York, Missouri, New Jersey, and Pennsylvania in this table is that these States are the seats of a large number of very wealthy privately endowed institutions, many of which were well established before the formation of the States. In most of these States it will be found that the State-supported higher institutions are, on the whole, receiving a great deal more money than the State-supported institutions of Alabama. Compared with the average of 34 cents for all the States of the Union,

Alabama is giving just 50 per cent less, or 17 cents. The group of Southern States previously mentioned expended, in 1918, 29 cents or 41 per cent more than Alabama.

TABLE 79.—Rank of States as to per capita receipts of higher educational institutions supported by the State, normal schools not included.

1. Nevada	\$2.43	27. Tennessee	\$0.58
2. Arizona	1.90	28. Florida .....	.55
3. Wyoming	1.62	29. Ohio .....	.53
4. Montana	1.60	30. Illinois .....	.48
5. Utah	1.55	31. Maine .....	.48
6. South Dakota	1.52	32. West Virginia .....	.48
7. Iowa	1.88	33. South Carolina .....	.43
8. Idaho	1.38	34. Virginia .....	.43
9. Nebraska	1.33	35. Connecticut .....	.35
10. Colorado	1.26	36. Mississippi .....	.34
11. California	1.21	37. Missouri .....	.33
12. Michigan	1.20	38. Maryland .....	.30
13. Minnesota	1.20	39. New York .....	.29
14. Oregon	1.19	40. North Carolina .....	.29
15. Kansas	1.14	41. Kentucky .....	.26
16. Wisconsin	1.08	42. Rhode Island .....	.25
17. New Mexico	1.04	43. Georgia .....	.24
18. Washington .....	.99	44. ALABAMA .....	.21
19. North Dakota .....	.92	45. Arkansas .....	.20
20. Vermont .....	.89	46. New Jersey .....	.15
21. Delaware .....	.87	47. Pennsylvania .....	.12
22. New Hampshire .....	.77	48. Louisiana .....	.09
23. Texas .....	.70		
24. Indiana .....	.68	Average for the United	
25. Oklahoma .....	.66	States .....	.80
26. Massachusetts .....	.65		

NOTE.—In Tables 78 to 79, the amounts appropriated for buildings and permanent improvements are included.

The apportionment per capita of the receipts of State higher institutions for 1918 is given in Table 79. Alabama again ranks very low, being forty-fourth, with a per capita apportionment of only 21 cents. The Southern States which surpass Alabama in this respect are Georgia with 24 cents per capita of the population, Kentucky with 26 cents, North Carolina with 29 cents, Mississippi with 34 cents, Virginia and South Carolina each with 43 cents, Florida with 55 cents, Tennessee with 58 cents, and Texas with 70 cents. Alabama surpasses only Arkansas and Louisiana in the South, although it should be borne in mind that Louisiana, relatively poor as her showing is, supports indirectly Tulane University, a large privately endowed institution, in addition to the State university. New Jersey and Pennsylvania show smaller per capita receipts for the State supported higher institutions, but this apparent deficiency is offset

by the very generous support given the many privately endowed universities and colleges of these States.

Analysis of the property and income of State-supported institutions of higher education in certain States.—The property and income of State-supported universities and colleges in Nevada, Arizona, South Dakota, Florida, Washington, South Carolina, Louisiana, Mississippi, Virginia, Iowa, Tennessee, Minnesota, North Carolina, Georgia, California, and Texas will now be discussed. The situation in Alabama will be compared with that in these States.

This group has been selected because it includes the most comparable Southern States. It includes typical States of the North and West. It also includes those States whose institutions of higher learning have been surveyed by the Bureau of Education. The bureau's studies relate to Arizona, Washington, Iowa, and South Dakota.

Tables 81 to 84 and figure 45 show the property of State higher institutions of learning, also the income from the State, the income from the United States, the income from all other sources, and the total income. From these tables appropriations for buildings and permanent improvements have been excluded. The tables give the 17 States according to rank of population. The data are compiled for the years 1910, 1917, and 1918, the average of the last two years mentioned being given also.

The proportion of white and colored population in these States is given in Table 80, in order to facilitate comparison between the white populations of the various States. With respect to total population, Alabama may be consistently compared with Georgia, North Carolina, Minnesota, Tennessee, Iowa, and Virginia. With respect to white population only, Alabama may be compared with Georgia, North Carolina, Tennessee, Virginia, Washington, and Mississippi.

TABLE 80.—Rank in total population of the 17 States discussed in this survey, including population of whites and Negroes.

States in rank of population.	Per cent white.	Per cent not white.	White.	Colored.	Total population, Jan. 1, 1918.
1. Texas.....	82	18	3,751,523	806,828	4,558,351
2. California.....	95	5	2,920,091	153,712	3,074,223
3. Georgia.....	55	45	1,501,736	1,313,994	2,815,730
4. North Carolina.....	68	32	1,555,139	784,064	2,339,203
5. ALABAMA.....	57	43	1,356,374	1,023,231	2,379,605
6. Minnesota.....	90	10	2,310,236	18,260	2,328,496
7. Tennessee.....	78	22	1,811,033	501,906	2,312,939
8. Iowa.....	99	1	2,209,397	15,347	2,224,744
9. Virginia.....	67	33	1,408,459	724,858	2,133,317
10. Mississippi.....	44	56	889,200	1,019,818	1,909,018
11. Louisiana.....	57	43	1,084,523	800,348	1,884,871
12. South Carolina.....	45	55	740,126	911,801	1,651,927
13. Washington.....	97	3	1,581,747	47,343	1,629,090
14. Florida.....	59	41	547,243	380,289	927,532
15. South Dakota.....	97	3	701,512	24,091	725,603
16. Arizona.....	73	27	223,386	46,546	269,932
17. Nevada.....	91	9	101,866	10,785	112,651

From the standpoint of total population, based upon the estimates made for January 1, 1918, Alabama ranks fifth in the group of 17 States given, but ranks seventh with respect to property of State higher institutions, being surpassed by Washington, Minnesota, and Iowa, in the North, and by Texas and Virginia in the South. (See Tables 80 and 81.)

TABLE 81.—*Value of State higher institutional property for 1910 and average for 1917 and 1918.*

States in rank of population.	1910.	States in rank of population.	Average during the two years 1917 and 1918.
1. California.....	\$14,027,011	1. California.....	\$19,391,311
2. Minnesota.....	7,820,798	2. Minnesota.....	12,506,018
3. Iowa.....	7,808,238	3. Washington.....	10,394,036
4. Washington.....	7,436,240	4. Iowa.....	10,378,785
5. Texas.....	5,298,473	5. Texas.....	7,809,609
6. Virginia.....	5,409,604	6. Virginia.....	6,780,686
7. ALABAMA.....	4,395,723	7. ALABAMA.....	3,904,351
8. Georgia.....	2,248,712	8. South Carolina.....	3,434,638
9. South Carolina.....	2,052,730	9. Mississippi.....	3,382,512
10. Mississippi.....	1,871,454	10. Georgia.....	2,821,541
11. North Carolina.....	1,845,870	11. North Carolina.....	2,555,837
12. South Dakota.....	1,713,738	12. South Dakota.....	1,917,093
13. Tennessee.....	1,269,121	13. Tennessee.....	1,877,385
14. Louisiana.....	1,151,380	14. Louisiana.....	1,289,287
15. Florida.....	879,871	15. Nevada.....	1,151,734
16. Nevada.....	661,671	16. Florida.....	1,150,650
17. Arizona.....	355,384	17. Arizona.....	850,821

¹ Does not include Montevallo.

² Includes Montevallo.

The most significant comparisons are those which may be made with States where conditions are nearly the same, as in Virginia, Mississippi, Louisiana, North Carolina, and Georgia. The value of the State higher institutional property of Alabama for the year 1917-18 is given at \$3,925,508. In Virginia the value of university property for the same year was \$6,753,060, or nearly twice as much; and in Texas for the same period it was \$8,211,810. If we compare Alabama with the Northern States with about the same white population, we find Iowa and Washington with over \$10,000,000 invested in State institutions of higher learning, while Minnesota has invested over \$12,000,000. It is evident from all viewpoints that Alabama is lagging far behind in the appropriation of sufficient funds for the proper endowment and the maintenance of first-class educational plants compared with other States of similar population. Comparing Alabama with small States like Nevada and Arizona, with scarcely a tenth, or less than a tenth of the population of Alabama, it appears that these States have invested in proportion fully three times as much in university property.

Income of State supported higher institutions.—The State higher institutions of Alabama receive their income from the State, the United States, and from miscellaneous sources. First in importance

is State support. According to figure 45 we find that Alabama for the year 1910 ranked fourteenth in the list of 17 States, the State support for State higher institutions having reached \$106,000.

Attention is especially called to the State support of State universities and colleges of North Carolina, \$150,000; of Virginia, \$225,495; of South Carolina, \$248,335; and of Texas, \$375,900. For the years 1917 and 1918 the position of Alabama has not improved.

AMOUNT OF INCOME GRANTED TO STATE INSTITUTIONS OF HIGHER LEARNING IN A SELECTED GROUP OF 17 STATES.
YEARS 1910-11, AND AVERAGE OF 1916-18, NORMAL SCHOOLS NOT INCLUDED. NEITHER APPROPRIATIONS FOR BUILDINGS AND PERMANENT IMPROVEMENTS.

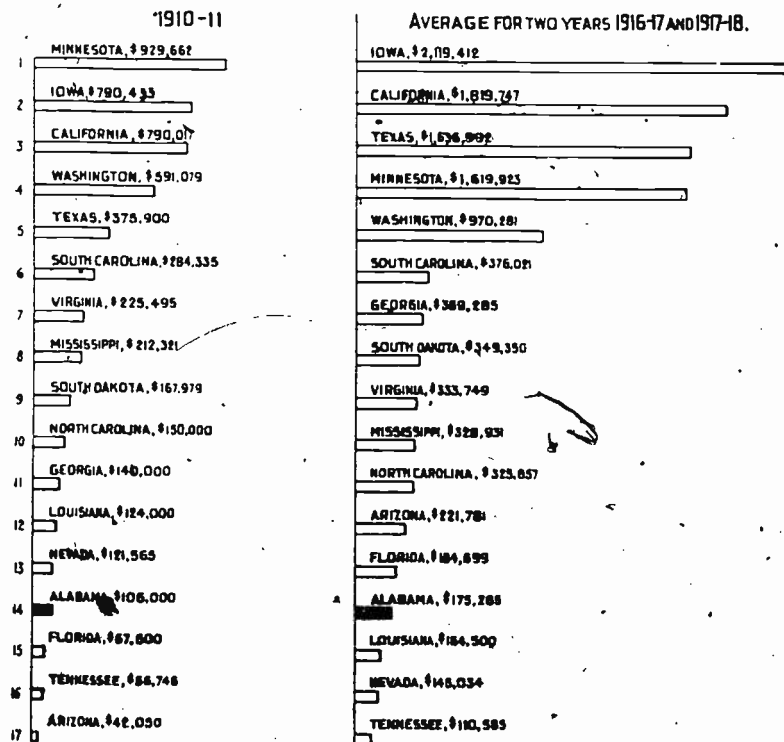


FIG. 45.

Although it still maintains its rank as fourteenth in the same group of States, the average income of the State university and other State colleges of Alabama for these years was only \$175,285. Among the several States which have greatly increased the support of their higher institutions of learning may be mentioned North Carolina, Mississippi, Virginia, Georgia, and South Carolina. These, in turn, are surpassed by Texas, which granted an average of \$1,636,992 dur-

ing the years 1917 and 1918. Compared with Iowa and California, the income given the higher institutions by the State of Alabama is insignificant. It is not more than 8 per cent of that which is granted by the State of Iowa, and about 10 per cent of that which is granted by the State of California. Five of the leading Southern States, two of which are contiguous to Alabama, granted nearly double the amount of support to State institutions of higher learning in the same years.

We will next consider support given by the United States to institutions of higher learning in the same group of 17 States.

TABLE 82.—Amount of United States support to State higher institutions of learning.

State in rank of population.	1910	State in rank of population.	Average for years 1917 and 1918.
1. Arizona.....	\$75,000	1. Texas.....	\$158,429
2. Nevada.....	45,000	2. Iowa.....	149,200
3. South Dakota.....	75,000	3. South Carolina.....	139,535
4. Washington.....	75,000	4. Tennessee.....	125,702
5. Iowa.....	75,000	5. North Carolina.....	125,043
6. Tennessee.....	75,000	6. Minnesota.....	123,523
7. California.....	75,000	7. Virginia.....	116,695
8. Minnesota.....	75,000	8. ALABAMA.....	116,535
9. Texas.....	63,750	9. California.....	114,834
10. North Carolina.....	60,180	10. Washington.....	104,075
11. Virginia.....	60,000	11. South Dakota.....	103,875
12. Louisiana.....	54,917	12. Mississippi.....	101,222
13. ALABAMA.....	54,628	13. Louisiana.....	100,585
14. Mississippi.....	32,320	14. Georgia.....	99,978
15. Florida.....	32,500	15. Arizona.....	93,850
16. South Carolina.....	32,400	16. Nevada.....	91,847
17. Georgia.....	30,000	17. Florida.....	79,565

According to Table 82, Alabama ranked ^{thirteenth} ~~thirtieth~~ in 1910, having received \$54,628 from the Federal Government. In the years 1917 and 1918 the State received on an average more than double the amount received in 1910. Its relative rank had advanced from thirteenth to eighth. This is due primarily to the progressive increase of the Federal funds since 1914. In that respect Alabama institutions show a gain in support from the Federal Government which stands in favorable contrast to the relative decline of State support during the same period.

The third source of income includes that received elsewhere than from the State or the United States. An income of this character can not be expected to show the same stability as may be expected of the income received from public sources. Nevertheless, the interest that the public has in State institutions may be gauged considerably by the amount which is obtained through private benefactions, alumni associations, and the like. According to Table 83, Alabama, in 1910, received \$148,979 from various sources. Its rank in the group of 17

States was sixth. Alabama was surpassed by Texas, with \$230,370, and by Virginia with \$303,872, as well as by three northern States.

TABLE 83.—*Income of State institutions of higher learning from sources other than the State and the United States.*

States in rank of population.	1910	States in rank of population.	Average for years 1917-18.
1. California.....	\$566,072	1. California.....	\$1,245,000
2. Iowa.....	397,744	2. Texas.....	1,126,682
3. Virginia.....	303,872	3. Iowa.....	867,738
4. Minnesota.....	263,138	4. Minnesota.....	745,370
5. Texas.....	230,370	5. Virginia.....	565,978
6. ALABAMA.....	143,972	6. Washington.....	398,449
7. North Carolina.....	136,096	7. Mississippi.....	293,309
8. Mississippi.....	132,036	8. ALABAMA.....	188,258
9. Washington.....	111,509	9. South Dakota.....	169,220
10. Tennessee.....	96,384	10. North Carolina.....	158,852
11. South Dakota.....	94,662	11. Arizona.....	121,784
12. Georgia.....	77,956	12. Louisiana.....	121,134
13. South Carolina.....	47,767	13. Tennessee.....	106,106
14. Louisiana.....	26,840	14. Georgia.....	90,086
15. Florida.....	22,920	15. South Carolina.....	70,721
16. Nevada.....	13,536	16. Florida.....	67,324
17. Arizona.....	10,996	17. Nevada.....	36,948

Notwithstanding the relatively good position of Alabama in this respect during 1910 there has been in succeeding years a considerable falling off in the income received from "other sources." The State in 1917 and 1918 ranked eighth in the list of 17 States with respect to such income. In the years 1917 and 1918 Alabama institutions averaged \$188,258 from other sources, being surpassed by those of Mississippi with \$293,309; by those of Virginia with \$565,978; and by those of Texas with \$1,126,682, as well as by those of four Northern States. It is evident that the interest of the citizens of Alabama in the higher institutions of the State as expressed through private benefactions has not grown to the extent that it has in many other States. Although there has been a slight increase in income from "other sources" during the period between 1910 and 1918, nevertheless, it has been very insignificant compared with the increase shown in Mississippi, Washington, Iowa, Texas, and California.

If the entire income of the State higher institutions is considered by States, excluding the appropriations for buildings and permanent improvements, we find, according to Table 84, that for the years 1917 and 1918 Alabama stood twelfth in the list of 17 States, being surpassed by Georgia, South Carolina, North Carolina, Mississippi, Virginia, and Texas of the Southern States, and by South Dakota, Washington, Minnesota, California, and Iowa of the North and West.

TABLE 84.—Average total income for years 1917-18.

1. Iowa	\$3, 136, 360
2. California	3, 180, 221
3. Texas	2, 922, 109
4. Minnesota	2, 479, 216
5. Washington	1, 473, 406
6. Virginia	1, 016, 418
7. Mississippi	728, 513
8. South Dakota	622, 445
9. North Carolina	609, 853
10. South Carolina	586, 277
11. Georgia	559, 329
12. ALABAMA	475, 075
13. Arizona	424, 700
14. Louisiana	388, 816
15. Tennessee	363, 450
16. Florida	340, 624
17. Nevada	268, 740

The institutions of the neighboring State of Mississippi received nearly 75 per cent more, those of Virginia considerably over twice as much, while those of Texas received during the same period nearly six times as much.

The question of support of State institutions may properly be treated by institutions as well as by States. According to Table 85 there are 14 State universities in the group of 17 States which have been used for comparisons. The average annual income of these State universities from 1913 to 1918 was as follows:

TABLE 85.—Average total income of State universities in the 17 States compared.

1. University of California	\$3, 373, 485
2. University of Minnesota	2, 645, 169
3. Iowa State University	1, 240, 780
4. University of Washington	732, 667
5. University of Tennessee	517, 951
6. University of Virginia	444, 143
7. University of Arizona	392, 968
8. University of Georgia	348, 882
9. Louisiana State University	288, 505
10. University of Nevada	258, 468
11. University of Florida	186, 981
12. UNIVERSITY OF ALABAMA	187, 169
13. University of South Carolina	189, 920
14. University of Mississippi	139, 881

According to this table the University of Alabama ranks twelfth. Attention is called to the fact that in Tables 85 and 86 the appropriations for buildings and other permanent improvements are included. The income of the independent land-grant colleges in these same States was as follows:

TABLE 86.—Average total income of land-grant colleges in the 17 States compared.

1. Iowa State College.....	\$1,479,832
2. Washington State College.....	592,862
3. Agricultural and Mechanical College of Mississippi.....	480,855
4. Virginia Polytechnic Institute.....	389,968
5. Clemson Agricultural College.....	362,475
6. ALABAMA POLYTECHNIC INSTITUTE.....	255,094
7. Georgia School of Technology.....	222,019

PERCENT INCREASE DURING THE PAST 10 YEARS IN STUDENT ENROLLMENT, TEACHING FORCE, AND INCOME FROM STATE AND PRODUCTIVE FUNDS; APPROPRIATIONS FOR BUILDINGS EXCLUDED.

UNIVERSITY OF ALABAMA

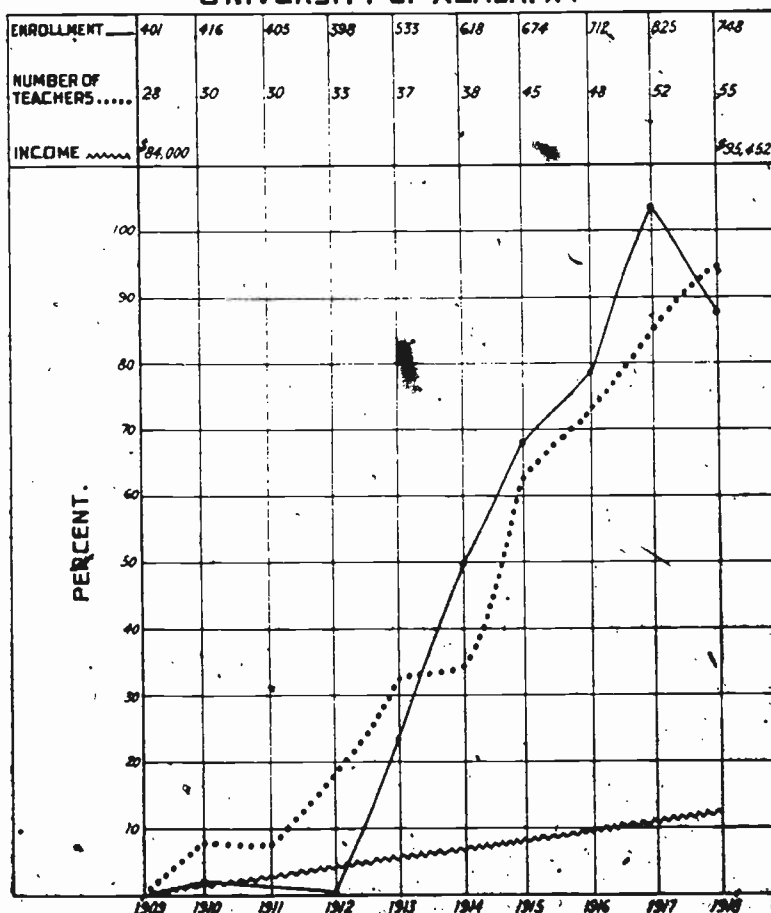


FIG. 46.

In this group of seven institutions, Alabama Polytechnic Institute ranks sixth in the amount of support from all sources, surpassing only

the Georgia School of Technology. The comparison is not entirely fair, owing to the fact that the University of Georgia includes the college of agriculture and receives the \$50,000 of the Federal land-grant fund.

Increase of State support of higher education.—Perhaps the most striking evidence of the inadequacy of State support for State higher educational institutions is found in the accompanying figures. According to figures 46 and 47 the student enrollment and teaching force of the university and of the Polytechnic Institute has increased

PERCENT INCREASE DURING THE PAST 10 YEARS IN STUDENT ENROLLMENT, TEACHING FORCE, AND INCOME FROM THE STATE AND PRODUCTIVE FUNDS, APPROPRIATIONS FOR BUILDINGS EXCLUDED.

ALABAMA POLYTECHNIC INSTITUTE

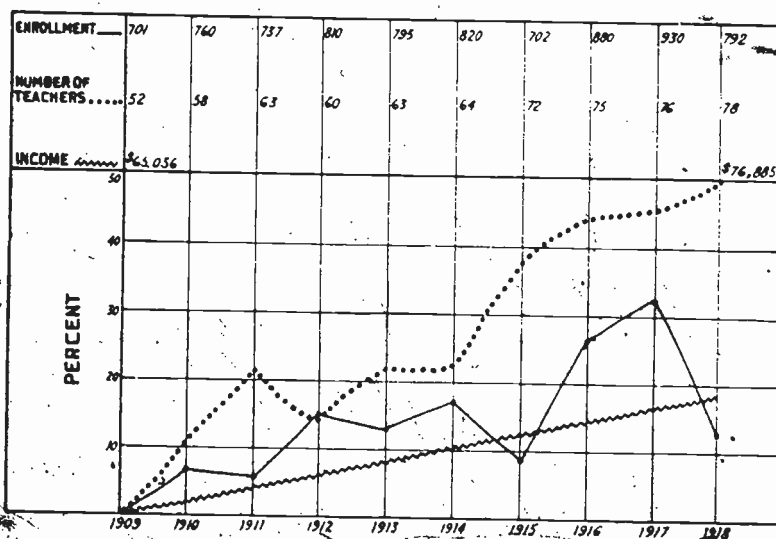


FIG. 47.

steadily and rapidly for the past 10 years. On the other hand, the income from the State has not increased either so rapidly or so constantly.

The same conditions hold true for the Alabama Girls' Technical Institute, as is shown by the following figures:

	Per cent.
Increase of students from 1908 to 1917	57
Increase of students from 1908 to 1918	87
Per cent gain based on the average of the two years	47
Increase of teachers from 1908 to 1917	21
Increase of teachers from 1908 to 1918	28
Per cent gain based on the average of the two years	24
Increase in State support from 1908 to 1918	12

(Income from State has been practically stationary for past three years.)

Instructional costs at Alabama State higher institutions.—Since 1915 the Bureau of Education has ascertained the per capita cost of instruction in the State higher institutions of Washington, Iowa, Nevada, Arizona, and South Dakota. These costs may properly be compared with those of the Alabama State institutions.

In Table 87 the per capita costs of instruction in the institutions surveyed by the Bureau of Education are given in minimum-maximum order, the figures being in most cases for two successive years.

TABLE 87.—*Per capita costs of instruction in the institutions surveyed by the Bureau of Education, in minimum-maximum order.*

1. ALABAMA GIRLS' TECHNICAL INSTITUTE, 1916-17.....	\$103.54
2. ALABAMA POLYTECHNIC INSTITUTE, 1916-17.....	140.19
3. ALABAMA POLYTECHNIC INSTITUTE, 1917-18.....	153.86
4. UNIVERSITY OF ALABAMA, 1916-17.....	155.09
5. ALABAMA GIRLS' TECHNICAL INSTITUTE, 1917-18.....	164.74
6. Iowa State Teachers' College, 1913-14.....	169.00
7. Iowa State Teachers' College, 1914-15.....	170.00
8. UNIVERSITY OF ALABAMA, 1917-18.....	186.30
9. Washington State University, 1914-15.....	192.77
10. Washington State University, 1913-14.....	223.49
11. South Dakota State University, 1916-17.....	241.29
12. Iowa State College, 1913-14.....	270.00
13. Iowa State College, 1914-15.....	271.00
14. South Dakota State University, 1915-16.....	271.30
15. Iowa State University, 1914-15.....	274.50
16. Iowa State University, 1913-14.....	275.00
17. Washington State College, 1914-15.....	289.79
18. South Dakota State School of Mines, 1916-17.....	350.12
19. Washington State College, 1913-14.....	358.87
20. Arizona State University, 1915-16.....	400.78
21. South Dakota State College, 1915-16.....	441.21
22. Nevada State University, 1914-15.....	443.18
23. South Dakota State College, 1916-17.....	468.85
24. Nevada State University, 1915-16.....	522.77
25. South Dakota State School of Mines, 1915-16.....	564.32

In Table 88 the same data are tabulated for the average of the two years included in the survey.

TABLE 88.—The per capita costs based on the average of the two years included in each survey.

1. Alabama Girls' Technical Institute, 1916-1918.....	\$134.14
2. Alabama Polytechnic Institute, 1916-1918.....	147.02
3. Iowa State Teachers' College, 1913-1915.....	169.00
4. University of Alabama, 1916-1918.....	170.69
5. Washington State University, 1913-1915.....	208.13
6. South Dakota State University, 1915-1917.....	256.29
7. Iowa State College, 1913-1915.....	270.50
8. Iowa State University, 1913-1915.....	274.75
9. Washington State College, 1913-1915.....	324.08
10. Arizona State University, 1915-16.....	400.73
11. South Dakota State College, 1915-1917.....	454.78
12. South Dakota State School of Mines, 1915-1917.....	457.22
13. Nevada State University, 1914-1916.....	482.97

Table 89 gives in detail the enrollment, average attendance, total operating expenses, excluding those of the summer school, and the cost per student based on the average for two successive years.

TABLE 89.—Comparative table of the per capita cost of higher education in the States of Washington, Iowa, Nevada, Arizona, South Dakota, and Alabama.

	Washington.		Iowa.			Nevada	Arizona
	State	State	State	State	Teachers'	State	State
	Univ-	College.	Univ-	College.	College.	Univ-	Univ-
	ersity.		ersity.			ersity.	ersity.
	1913-14		1913-14			1914-15	1915-16
Number of students enrolled the first semester.....	2,263	947	2,343	2,292	{ 1,297 1,348 }	310	403
Number of students enrolled the second semester.....	2,373	972	2,235	2,207	1,245	316	.....
Total enrollment.....	4,636	1,919	4,580	4,559	3,926	626	.....
Average attendance for the year.....	2,318	959.5	2,290	2,279	1,308	313	413
Total operating expenses excluding summer school.....	\$517,505	\$343,865	\$529,069.24	\$516,654.33	\$220,018.22	\$138,717.96	\$165,510.90
Cost per student of average attendance.....	\$223.49	\$358.37	\$273.00	\$270.00	\$168.00	\$443.18	\$400.73
	1914-15		1914-15			1915-16	
Number of students enrolled first semester.....	2,724	1,013	2,416	2,522	{ 1,406 1,485 }	328	.....
Number of students enrolled second semester.....	2,645	956	2,303	2,467	1,366	331	.....
Total enrollment.....	5,369	1,969	4,719	4,989	4,257	659	.....
Average attendance for the year.....	2,684.5	984.5	2,360	2,465	1,419	329.5	.....
Total operating expenses excluding summer school.....	\$517,505	\$355,299	\$548,195	\$577,146.66	\$241,007.53	\$172,254.23	.....
Cost per student of average attendance.....	\$192.77	\$359.79	\$274.50	\$271.00	\$170.00	\$522.77	.....

¹ Arizona includes one year's report only.

² Terms.

³ Estimate of registrar.

TABLE 89.—Comparative table of the per capita cost of higher education in the States of Washington, Iowa, Nevada, Arizona, South Dakota, and Alabama—Continued.

	South Dakota.			Alabama.		
	State University.	State College.	School of Mins.	State University.	Polytechnic Institute.	Girls Polytechnic Institute.
	1915-16			1916-17		
Number of students enrolled the first semester.....	558		67			
Number of students enrolled the second semester.....	505		62			
Total enrollment.....	1,063		129		931	566
Average attendance for the year.....	531	358	65	731	850	491
Total operating expenses excluding summer school.....	\$144,078.07	\$168,955.00	\$36,680.51	\$113,369.17	\$119,159.69	\$49,801.31
Cost per student of average attendance.....	\$271.30	\$441.21	\$564.32	\$155.08	\$140.19	\$103.64
	1916-17			1917-18		
Number of students enrolled first semester.....	631		116			
Number of students enrolled second semester.....	622		78			
Total enrollment.....	1,253		194		792	491
Average attendance for the year.....	626	865	97	622	715	418
Total operating expenses, excluding summer school.....	\$151,059.00	\$170,947.71	\$33,961.57	\$115,878.02	\$110,010.47	\$68,537.82
Cost per student of average attendance.....	\$241.29	\$468.35	\$350.12	\$186.30	\$153.96	\$164.74

Terms.

Basis of comparing costs.—Previous investigations by the bureau have led to the conclusion that before the war a per capita cost of \$275 represented a fair estimate for a State university. It was assumed that the per capita cost of a State agricultural and mechanical college would exceed this figure owing to the larger outlay required for maintaining the extensive laboratory and farm equipment.

Present costs of Alabama State institutions compared with pre-war costs of State higher institutions of Washington, Nevada, Iowa, Arizona, and South Dakota.—Using Table 88 for this comparison, we find that the per capita costs of the Alabama Polytechnic Institute and the Alabama Girls' Technical Institute are the lowest of the 13 institutions compared. The costs of the University of Alabama are lower with one exception than those of any other institution listed in the table, excluding the two other institutions from Alabama. The per capita cost at the Alabama Girls' Technical Institute, 1916-1918, was 49 per cent of the per capita cost at the Iowa State University for 1918-1915. The per capita cost at Alabama Polytechnic

Institute was 58 per cent and that at the University of Alabama was 65 per cent of the per capita cost at the Iowa State University.

If the per capita costs in Alabama were compared with the 1918 estimates of per capita cost for a university of recognized standards the comparison would be still more unfavorable. Recent inquiries show that the expenses involved in providing higher education have increased anywhere from 30 to 50 per cent throughout the United States. But assuming conservatively that the present average per capita cost of instruction in a standard college or university may be estimated at a minimum of \$300, the following comparisons may safely be made:

1. If the average cost of instruction per student at the University of Alabama had been \$300, the expenditures for the last academic year would have been \$223,903. They were \$138,820.

2. If the average cost per student at the Alabama Polytechnic Institute had been \$300 the expenditures for the same year would have been \$220,020. They were \$110,010.

3. The per capita cost of instruction at an institution like the Alabama Girls' Technical Institute is not expected to be so high as that of the State University. If we assume that \$250 represents a fair per capita cost for an institution of this type then the Alabama Girls' Technical Institute should have received \$103,868 instead of \$62,537.

Inadequacy of present budgets.—A study of the budgets of the State University, the Polytechnic Institute, and the Girls' Technical Institute, in the light of the discussion in the preceding section, points to the need of an immediate revision of the annual estimates for instruction, administration, and maintenance. It is evident that the requests of the administrators of the three institutions mentioned have been extremely moderate. Even if the requests were granted, the institutions could not be expected to maintain the standards which would be creditable to a State of the wealth and importance of Alabama. In the past, the State institutions have been voted certain conditional appropriations. Only a portion of these have materialized. Attention should be called to the fact that it is impossible to budget these conditional appropriations in a satisfactory manner.

The present plan of budgeting is also subject to another criticism. The estimates given are on the basis of an average amount for each of the next four years. Sufficient calculation has not been made for the necessary annual increase in expenditures. It is the opinion of the committee that in calculating the budget for the next quadrennium, provision should be made to increase the annual amounts in harmony with the per cent of the growth of expenditures as indicated by the figures shown during the last five years.

The support of the Alabama A. & M. College for Negroes.—The support of the Alabama Agricultural and Mechanical College for Negroes merits consideration. According to Table 90 there are 17 colored land-grant institutions which receive a portion of the Morrill funds. The principal sources of income for Negro land-grant colleges are the Federal Government and States. Among the 17 colored agricultural and mechanical colleges in the country that of Alabama ranks fourth in the amount received from the Federal Government, the sum being \$22,100. Considering the racial division in the State of Alabama, this is an entirely equitable apportionment. Nevertheless, the Alabama Agricultural and Mechanical College for Negroes is seriously handicapped on account of the lack of State support. According to Table 91, the State of Alabama ranks fourteenth in the list with respect to support of Negro agricultural and mechanical colleges, the sum annually granted being \$4,000. The appropriations to the Negro agricultural and mechanical colleges in Mississippi, Georgia, and Florida are at least twice as much; in South Carolina and Louisiana, three times as much; in Tennessee, nearly six times as much as those made to the similar institution in Alabama. The amount granted to the Negro land-grant college at Prairie View Tex., is \$61,255. The position of Alabama is really lower in this scale than it would appear, owing to the fact that Arkansas has considerably less population and wealth than Alabama, and Delaware is very much smaller in population and wealth. Yet both States give nearly as much as Alabama. Hampton Institute, Virginia, is primarily a privately endowed institution, receiving very ample support from its endowments. Its status is only quasi-public.

TABLE 90.—Federal appropriations to Negro land-grant colleges, 1916-17.

Institutions.	Morrill-Nelson fund.	Other Federal funds.	Total.
1. Alcorn Agricultural and Mechanical College, Mississippi.....	\$27,200	\$12,563	\$39,763
2. Florida Agricultural and Mechanical College for Negroes.....	25,000		
3. Colored Normal, Industrial, Agricultural, and Mechanical College, South Carolina.....	25,000	5,745	30,745
4. STATE AGRICULTURAL AND MECHANICAL COLLEGE FOR NEGROES, ALABAMA.....	22,100		
5. Southern University and Agricultural and Mechanical College, Louisiana.....	21,144		
6. Georgia State Industrial College.....	16,667		
7. Hampton Normal and Agricultural Institute, Virginia.....	16,667	10,329	26,996
8. Negro Agricultural and Technical College, North Carolina.....	16,800		
9. Branch Normal College, Arkansas.....	13,636		
10. Prairie View State Normal and Industrial College, Texas.....	12,500		
11. Agricultural and Industrial State Normal School for Negroes, Tennessee.....	12,000		
12. State College for Colored Students, Delaware.....	10,000		
13. Princess Anne Academy, Maryland.....	10,000		
14. West Virginia Collegiate Institute.....	10,000		
15. Kentucky Normal and Industrial Institute for Colored Persons.....	7,250	1,266	8,516
16. Colored Agricultural and Normal University, Oklahoma.....	5,000		
17. Lincoln Institute, Missouri.....	3,125		

TABLE 91.—*State appropriations to Negro land-grant colleges, 1916-17. Funds for building and permanent improvement excluded.*

1. Prairie View State Normal and Industrial College, Texas.....	\$61,255
2. Lincoln Institute, Missouri.....	51,974
3. Colored Agricultural and Normal University, Oklahoma.....	45,000
4. West Virginia Collegiate Institute.....	33,500
5. Agricultural and Industrial State Normal School for Negroes, Tennessee.....	23,931
6. Kentucky Normal and Industrial Institute for Colored Persons.....	18,250
7. Negro Agricultural and Technical College, North Carolina.....	15,000
8. Southern University and Agricultural and Mechanical College, Louisiana.....	12,500
9. Colored Normal, Industrial, Agricultural, and Mechanical College, South Carolina.....	11,500
10. Florida Agricultural and Mechanical College for Negroes.....	9,000
11. Georgia State Industrial College.....	8,000
12. Alcorn Agricultural and Mechanical College, Mississippi.....	8,000
13. Princess Anne Academy, Maryland.....	4,436
14. STATE AGRICULTURAL AND MECHANICAL COLLEGE FOR NEGROES, ALABAMA.....	4,000
15. State College for Colored Students, Delaware.....	3,500
16. Branch Normal College, Arkansas.....	3,000
17. Hampton Normal and Agricultural Institute, Virginia.....	600

TABLE 92.—*Total income, Negro land-grant colleges. Funds for building and permanent improvement excluded.*

1. Prairie View State Normal and Industrial College, Texas.....	\$323,749
2. Hampton Normal and Agricultural Institute, Virginia.....	307,444
3. Agricultural and Industrial State Normal School for Negroes, Tennessee.....	137,025
4. Alcorn Agricultural and Mechanical College, Mississippi.....	79,635
5. Colored Agricultural and Normal University, Oklahoma.....	74,870
6. Colored Normal, Industrial, Agricultural, and Mechanical College, South Carolina.....	73,114
7. West Virginia Collegiate Institute.....	72,473
8. Lincoln Institute, Missouri.....	58,879
9. Negro Agricultural and Technical College, North Carolina.....	55,445
10. Florida Agricultural and Mechanical College for Negroes.....	55,254
11. Southern University and Agricultural and Mechanical College, Louisiana.....	53,981
12. Kentucky Normal and Industrial Institute for Colored Persons.....	36,901
13. STATE AGRICULTURAL AND MECHANICAL COLLEGE FOR NEGROES, ALABAMA.....	29,932
14. Princess Anne Academy, Maryland.....	27,200
15. Georgia State Industrial College.....	24,687
16. Branch Normal College, Arkansas.....	19,705
17. State College for Colored Students, Delaware.....	17,909

Considering the total income of Negro land-grant colleges, excluding the appropriations for buildings and permanent improvements, the Alabama Agricultural and Mechanical College for Negroes ranks

thirteenth among the 17 State institutions compared, having a total income of \$29,932. (See Table 92.) Compared with the Negro land-grant colleges in neighboring States, the income of the Alabama Agricultural and Mechanical College for Negroes exceeds that of the Georgia institution only.

The conditions upon which the Federal funds are appropriated make it impossible that these moneys be expended for administration and general maintenance. It is therefore essential to the successful working of any Negro land-grant institution in the South, receiving a part of the Morrill fund, that the State appropriate the necessary sums for administration, general equipment, and development of the institution.

SUMMARY OF RECOMMENDATIONS RELATING TO HIGHER EDUCATION.

1. The reform of the revenue system, as outlined in Chapter XXIII.
2. A large increase in the appropriations for the College of Agriculture of the Alabama Polytechnic Institute.
3. Emphasis by the Alabama Polytechnic Institute on the training of leaders in scientific agriculture and rural life.
4. The gradual differentiation of the programs of engineering education of the University of Alabama and the Alabama Polytechnic Institute, as follows: (a) Both institutions to continue to offer civil, chemical, electrical, and mechanical engineering. (b) The University of Alabama to relate its work directly to the needs of the mining and industrial districts, and to develop commercial and industrial engineering, hydraulic engineering, and sanitary engineering. (c) The Alabama Polytechnic Institute to emphasize investigations and training in highway engineering, agricultural engineering, and textile engineering.
5. The determination by the State council of education of the advisability of continuing degree curricula in architecture and architectural engineering.
6. Increased appropriations for the support of engineering education at both the Alabama Polytechnic Institute and the University of Alabama.
7. A large increase in the appropriations for the school of education of the University of Alabama to provide additional instructors.
8. The release of the Peabody fund and the supplementing of it by an amount sufficient to provide an educational building.
9. Provision for the establishment of a practice school under the direction of the school of education of the University of Alabama.

10. An increase in the support of the school of agricultural education at the Alabama Polytechnic Institute, to cover practice-teaching facilities and additional instructors.

11. The appropriation of at least \$10,000 a year to both the University of Alabama and the Alabama Polytechnic Institute for the maintenance of summer schools.

12. The continued recognition of the graduates in home economics, music, and commercial branches of the Alabama Girl's Technical Institute as candidates for high-school positions in these subjects.

13. The early abandonment of the attempt to continue for the present a four-year medical school in connection with the University of Alabama, and the transfer of the first two years of medical education from Mobile to Tuscaloosa.

14. Pending the time when the Mobile school can be legally discontinued, the strengthening of the first two years of its work only.

15. The maintenance of two centers of postgraduate teaching in medicine, one at Mobile and one at Birmingham, and the proper support of these centers.

16. The concentration of education in pharmacy for the present at the Alabama Polytechnic Institute.

17. Adequate appropriations for the support of the College of Veterinary Medicine at the Alabama Polytechnic Institute.

18. The placing of the college of law of the University of Alabama on a standard basis, and the appropriation of sufficient money for its support.

19. The approval of the estimates for work in commerce at the University of Alabama and a study of the needs in higher commercial training by the State council of education.

20. The establishment of a department of forestry at the Alabama Polytechnic Institute.

21. The establishment of a division of home economics at the Alabama Polytechnic Institute and the transfer to that institution of the Smith-Hughes work in the training of teachers in home economics, and the consequent expansion of the school of agricultural education to include the training of teachers in home economics.

22. The abandonment of the plan to develop the Alabama Girls' Technical Institute into a four-year college of liberal arts for women, and the rehabilitation of its original program as a technical institute.

23. The admission to the general course at the Alabama Polytechnic Institute of only such students as meet the full entrance requirements without conditions.

24. Appropriations sufficient to cover an immediate increase of at least 50 per cent in instructional costs at the college of arts and sciences of the University of Alabama, together with provision for

continuing support to keep pace with anticipated growth in enrollments.

25. The development of definite programs of research by the University of Alabama and the Alabama Polytechnic Institute and the inclusion of estimates to cover these programs in their future budgets.

26. The assumption by the State of a larger financial responsibility for the program of agricultural extension of the Alabama Polytechnic Institute than is required to meet the terms of the Smith-Lever Act.

27. The approval of the estimate for university extension in the present budget of the University of Alabama.

28. The approval of the present budget of the A. & M. College for Negroes, and continued appropriations to enable it to develop effective training in agriculture and mechanic arts.

29. The creation of a State council of education, as recommended in Chapter IV, the future determination by it of State needs in the field of professional training, and the allocation of the different portions of the tasks of professional training among the several higher institutions in harmony with the foregoing definition of the spheres of those institutions.

30. The modification of the constitution to provide for the appointment by the governor of members of the board of trustees of the University of Alabama.

31. The modification of the constitution to provide for lengthening the tenure of office of the members of the board of trustees of the Alabama Girls' Technical Institute to coincide with the tenure of the members of the governing boards of other State higher institutions.

32. The reorganization of the plan of internal administration of the Alabama Polytechnic Institute.

33. A redistribution of the ratio of professors to instructors at the university and the Alabama Polytechnic Institute.

34. The establishment of safeguards against faculty inbreeding at the Alabama Polytechnic Institute.

35. The reduction of teaching and administrative loads of faculty members at the university and the Alabama Polytechnic Institute.

36. Reduction in the size of certain sections at the university and the Alabama Polytechnic Institute.

37. Elimination as far as possible of very small classes at the university and the Alabama Polytechnic Institute.

38. The establishment of 15 teaching hours as the maximum for a full-time instructor, and of 250 to 300 student clock hours as the normal average load.

39. The establishment of temporary average maximum salaries for deans at \$3,500, for full professors at \$3,000, and for associate and assistant professors at \$2,500.

40. The exclusion from admission to degree curricula of students from four-year high schools who present only 12 units.

41. The enforcement by the State higher institutions of a uniform system of entrance requirements in harmony with the standards of the Association of Colleges and Secondary Schools of the Southern States.

42. The publication by the higher institutions of such classifications of students as will show plainly which are enrolled in special, irregular or noncollegiate curricula as differentiated from those pursuing regular curricula.

Chapter XXIII.

FINANCING THE SCHOOLS: WHAT THE STATE INVESTS IN PUBLIC EDUCATION.

Ample funds, the fundamental problem.—How well or how poorly the State supports its public schools is the most fundamental problem of the entire survey. For this reason its discussion has been deferred until all other questions could be disposed of. Education costs money, and, if it is to be a good education—the kind necessary in a democracy like ours—it requires a liberal amount of money. A cheap, shoddy school system is the most expensive system both in immediate results and in lasting effects on the people. That Alabama has not invested enough funds in its schools is undeniable in face of the facts laid down in the foregoing chapters. The schools have failed to reach all the people of the State. They have not, to any appreciable degree, influenced health conditions in the State. They have scarcely yet made the beginnings of organizing study courses to meet the real occupational needs of the population. The school plants are generally inadequate and meagerly equipped. The teacher-training institutions are poorly supported and teachers' salaries are so low that teaching as a profession in Alabama is becoming seriously jeopardized. The State's higher educational institutions are, in contrast with similar schools in other States, very meagerly supported.

Now, just what does Alabama invest in the educational system described above? Are the returns commensurate with the investment made? If the present investment is wholly inadequate, how will it be possible to supply the necessary funds? Can the present tax laws and methods in use for enforcing these laws be improved so as to supply this increased revenue without working undue hardship to the people? These and similar questions will be considered in the following paragraphs:

What the present sources of revenue are.—Alabama utilizes State, county, and district taxes for maintenance of its schools. Of these, the State appropriates the proceeds from certain permanent funds, a constitutional millage tax, and direct legislative appropriations.

These several sources are known as the "General educational fund." The county funds are derived from millage taxes, a State-wide poll tax apportioned to the county school funds, and certain "other sources." The local school district support comes from millage taxes, "donations" from municipal revenues, tuition fees, and similar sources.

The State constitution and successive legislative enactments contain the following provisions pertaining to public-school maintenance. These are exclusive of the higher educational institutions, special schools and secondary schools:

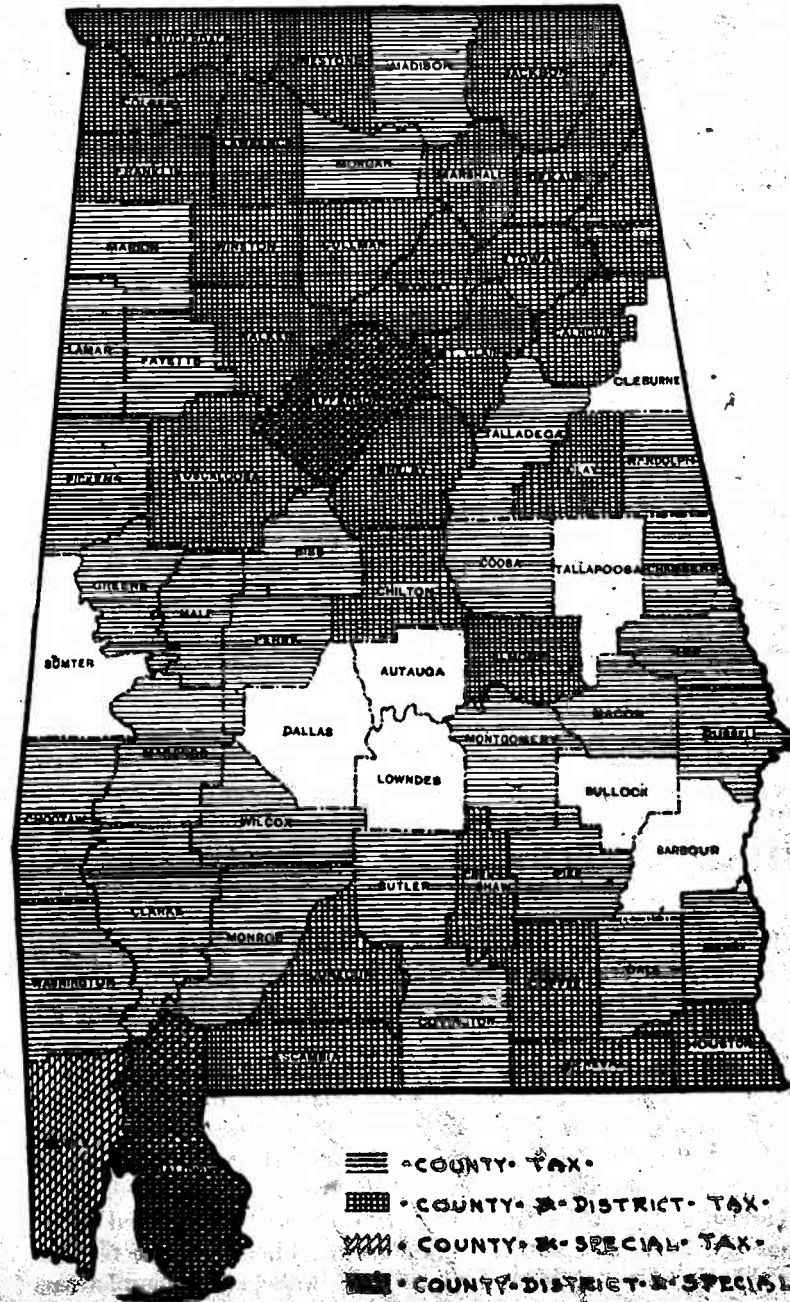
1. The annual interest at 6 per cent on all sums of money which have heretofore been or which may hereafter be received by the State as the proceeds of sales of lands granted or entrusted by the United States to the State, or to the several townships thereof, the valueless sixteenth section fund, and the school indemnity fund for school purposes.
2. The annual interest at 4 per cent on that part of the surplus revenue of the United States deposited with the State under the act of Congress approved June 23, 1836.
3. All annual rents, incomes and profits or interest arising from the proceeds of sales of all such land as may hereafter be given by the United States, or by this State, or by individuals, for the support of the public schools of the State.
4. All such sums as may accrue to the State as escheats, the same to be applied to the support of the public schools during the scholastic year next ensuing the receipt in the State treasury.
5. The net amount of poll tax that may be collected in the State; poll tax collected in every county to be retained therein for the support of the public schools thereof.
6. Licenses which are by law required to be paid into the school fund of any county to be promptly paid by the judge of probate or other person collecting the same to the county superintendent of education, and to be expended for the benefit of the public schools of each county.
7. A further sum of \$500,000 annually for every scholastic year, provided, however, that there is hereby appropriated the additional sum of \$100,000 annually, if in the judgment of the governor of Alabama the financial condition of the State treasury will permit of such additional appropriation. Provided, that the sum of \$250,000 per annum shall be paid only on the approval of the governor, who may approve the same in whole or in part from time to time.
8. That any county in the State and any school district now existing or hereafter formed in any county, may levy and collect a special tax for public-school purposes, not exceeding 80 cents on each \$100 worth of taxable property in such county and in such district.

What these sources of revenue produce for educational investment.—The general educational fund for the scholastic year 1917-18 was made up from items 1, 2, 3, 4, and 7 in the above enumeration,

*This \$250,000 has never been released by the governor.

*This is in addition to an old 1 mill county tax legalized in 1901, and special taxes in five counties.

DISTRIBUTION OF KINDS OF TAXATION



Map 12.

together with a small balance on hand and examination fees, and included the following sums:

Unapportioned balance.....	\$8,383. 03
Constitutional 3-mill tax (net).....	1,890,588. 70
Special school tax, land redemptions.....	7,391. 23
Special school tax, former years.....	3,072. 47
Fees, examination of teachers (net).....	78. 08
Escheats.....	8,612. 04
Interest on—	
Sixteenth section lands.....	126,426. 47
Valueless sixteenth section lands.....	5,825. 47
School indemnity lands.....	10,221. 72
Surplus revenue.....	26,763. 47
James Wallace fund, Lawrence County, under act approved Feb. 28, 1911.....	275. 25
Legislative appropriation.....	350,000. 00
	<u>2,437,637. 93</u>

This total, except the annual appropriation of \$350,000, must, under law, be used for the payment of salaries of teachers, principals, and supervising officials. From the legislative appropriation of \$350,000 must be deducted \$112,000 for normal school maintenance, \$87,000 for the erection, repair, and equipment of schoolhouses, and \$6,500 for the teachers' institute fund, leaving in all in this fund \$161,500. The above sum, \$2,437,637.93, comprised the general educational fund for the year and after deducting the State appropriations indicated above was apportioned to the several counties on a per capita basis, as provided for in the State constitution. This is the only fund available for public school purposes, unless county and district taxes are voted, or supplements, fees, etc., are added locally.

The county fund for 1917-18 received in addition to the constitutional 3-mill State tax and other State taxes approximately \$1,855,000 from the county mill tax, \$188,950 from poll taxes, and \$131,000 for bonuses and dog taxes.

Local district taxes are not yet utilized to any great extent, 109 school districts, all told, voting them. In no case may a district tax be voted until after the county tax has been levied. The reason for this is self-evident.

To supplement the school funds in towns and cities, the town and city councils may make direct appropriations from the regular municipal levy—a plan that has proved wholly unsatisfactory, since it throws the school authorities wholly upon the mercy of the city council which has absolute control of the budget.

Incidental fees and popular subscriptions are also utilized to increase the funds with which to maintain the schools. These features are objectionable and clearly indicate the newness and incompleteness

of taxation for public education in Alabama. Fortunately, this practice is being rapidly discontinued.

The higher institutions of learning, the county high schools, and special schools of all kinds are excluded from the above statement but receive, instead, direct legislative and other appropriations. The following table gives the total summarized expenditures of all classes of schools in the State for 1917-18:

TABLE 93.—Amount expended for schools.

Public schools.....	\$5,725,772
County high schools.....	240,524
District agricultural schools.....	62,764
Normal schools.....	614,826
University of Alabama.....	194,793
Alabama Polytechnic Institute.....	138,805
Alabama Girls' Technical Institute.....	64,909
Alabama School for Deaf and Blind.....	88,220
Alabama Boys' Industrial School.....	57,443
Northeast Alabama Agricultural and Industrial Institute.....	8,782
Private and denominational schools.....	1,124,836
Alabama Reform School for Juvenile Negro Lawbreakers.....	19,408
State Training School for Girls.....	34,575
Total.....	8,875,637

How this investment compares with expenditures in other States.—Are the expenditures summarized above really commensurate with the needs of a great State like Alabama? This query has already been answered in the negative. But how, then, do they compare with the school investment of the country as a whole and with other Southern States? Three maps have been prepared to furnish this comparison. The first of these (Map 19) shows graphically the amount spent for education in each State per capita of total population. *On this basis Alabama ranks as the forty-seventh State, Mississippi alone making a poorer showing.*

The second map (Map 20) tells the same story on the basis of school population, 5 to 18 years of age. Here Alabama ranks forty-sixth, Mississippi and South Carolina only standing lower.

Finally, the third map (Map 21) gives the total investment per child, 5 to 18 years of age. This included the total value of all school property in the United States used for school purposes. *Here Alabama ranks lower than any other State in the country.* Alabama is richer than many of the States that are investing much larger sums in education. Not only must the State exert itself to keep abreast of others in this matter, but it must plan to invest ever-increasing sums on public education, which is in no sense a money-saving process. *The present conditions in the United States demand a much larger ex-*

penditure than heretofore, in order to obtain the efficiency in school service required for the period of after-war reconstruction.

TABLE 94.—Per capita investment on the basis of total school population, 1918.

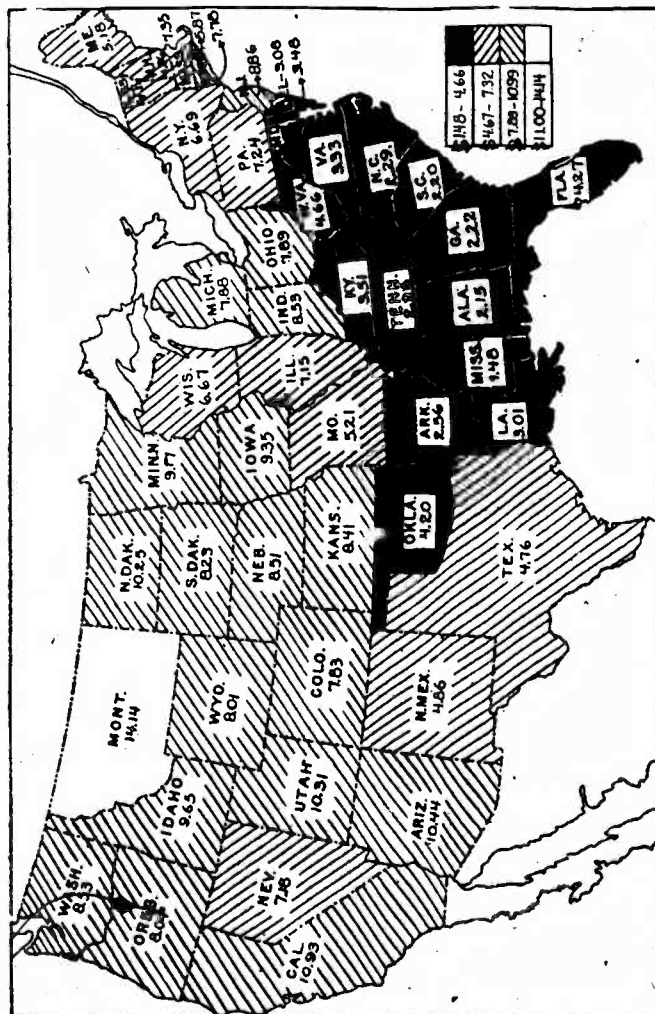
1. Mobile	\$14.62	35. Tallapoosa	\$5.99
2. Jefferson	14.41	36. Butler	5.98
3. Baldwin	13.52	37. Lee	5.81
4. Chambers	11.25	38. Fayette	5.79
5. Escambia	10.87	39. Crenshaw	5.72
6. Lauderdale	9.78	40. DeKalb	5.59
7. Montgomery	9.69	41. Coosa	5.50
8. Pike	9.58	42. Cullman	5.46
9. St. Clair	9.13	43. Lamar	5.43
10. Walker	9.01	44. Marshall	5.43
11. Morgan	8.89	45. Clarke	5.21
12. Etowah	8.74	46. Coffee	5.19
13. Houston	8.73	47. Blount	5.09
14. Monroe	8.64	48. Lawrence	5.06
15. Madison	8.44	49. Dallas	4.95
16. Shelby	8.44	50. Marion	4.80
17. Talladega	7.76	51. Marengo	4.78
18. Covington	7.70	52. Henry	4.68
19. Washington	7.61	53. Autauga	4.67
20. Ohlton	7.44	54. Choctaw	4.61
21. Franklin	7.33	55. Macon	4.59
22. Calhoun	7.20	56. Cherokee	4.50
23. Colbert	7.19	57. Cleburne	4.49
24. Bibb	7.14	58. Perry	4.30
25. Geneva	7.08	59. Hale	4.28
26. Elmore	6.98	60. Jackson	4.27
27. Tuscaloosa	6.98	61. Wilcox	4.17
28. Limestone	6.90	62. Bullock	4.10
29. Conecuh	6.80	63. Barbour	4.09
30. Randolph	6.76	64. Greene	4.09
31. Pickens	6.67	65. Russell	3.96
32. Clay	6.51	66. Lowndes	3.54
33. Dale	6.50	67. Sumter	3.26
34. Winston	6.35		

A closer analysis of the taxing system.—With the one exception of Montana, Alabama has depended more completely than any other State on State taxation for the maintenance of its schools. Even at the present time, with all except eight counties voting a county tax, Alabama makes less use of local taxation than any other State in the Union, although it should in justice be said that county and district taxes are now increasing at quite a remarkable rate.

Without going any further into the matter of tax equalization at this juncture, it is deemed desirable to make a closer study of the several sources from which the funds are derived.

1. The permanent school fund, depleted through bad trusteeship.—Perhaps the darkest page in Alabama educational history

is the lamentable story of how the State has discharged its trusteeship of the vast acreage of school lands granted by the Federal Government, the lease-of sale of which should be "invested in some productive fund, the proceeds of which shall be forever applied for the use and support of the schools—for which they were originally



EXPENDED PER CAPITA TOTAL POPULATION, 1915-16.

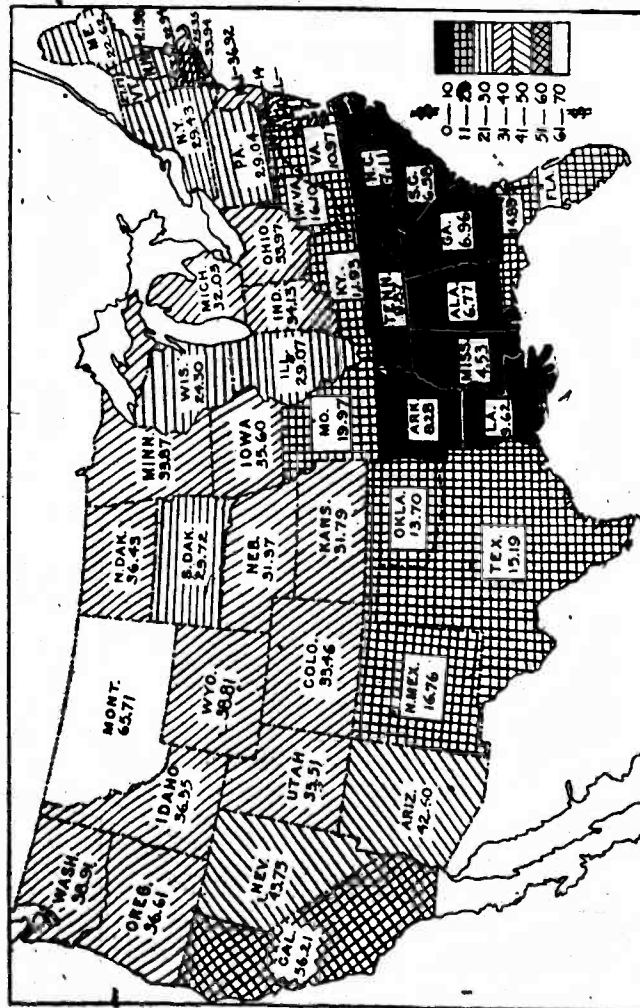
MAP 19.

[Alabama ranks as forty-seventh State.]

reserved and set apart, and for no other purpose whatsoever." The details of this stewardship have been told above (see Chapter III) and need only the briefest mention here.

The Federal Government granted Alabama, in common with other States organized prior to 1836, the sixteenth section of land

in each township in the State for school purposes. Whenever this section had already been disposed of, the State was given the right to select in lieu thereof other unoccupied lands—the so-called “indemnity lands.” This great domain amounted in all to 1,006,080 acres. Later on the State received upward of 100,000 acres “for use



AVERAGE EXPENDITURE PER CAPITA OF POPULATION, 5-18 YRS., 1915.

MAP 20.

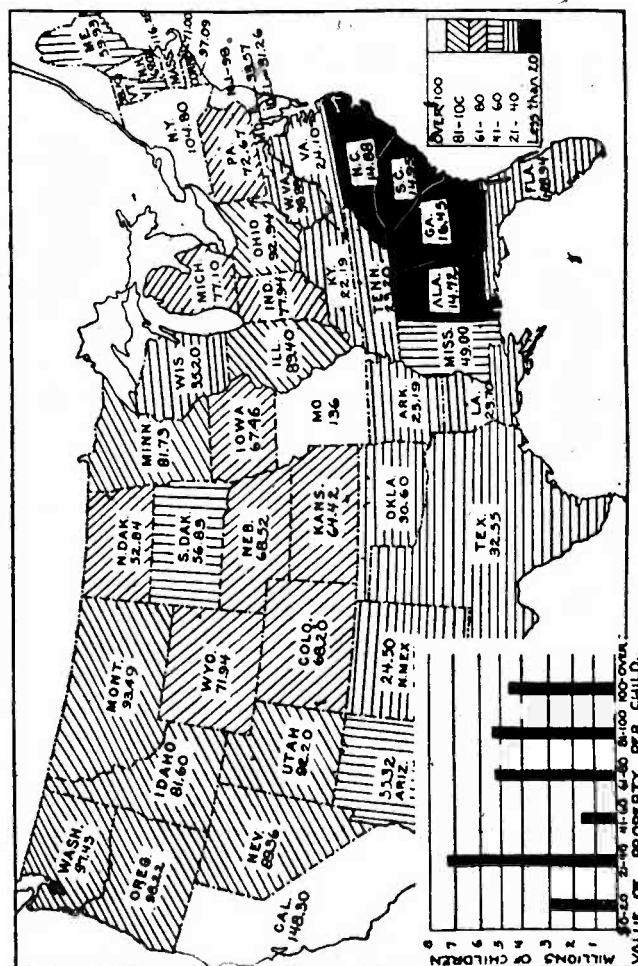
[Alabama ranks as forty-sixth State.]

in schools in those townships where the sixteenth sections are comparatively valueless.”

It is noticeable from the chart that Alabama derived more than one-half of its school revenues from State and permanent funds.

Beginning in 1825, the State authorized the sale or lease of the school lands, the proceeds to be invested in the United States Bank

or the State Bank of Alabama, the interest on which only should be used for school purposes. The State bank had collected more than one million dollars and it or its branch banks held nearly one-half million of land notes, when it went into receivership in 1848. The State thus lost practically the entire school fund accumulated up



It is true that an attempt was made, under act of 1881, to accumulate all future sales and settlements on outstanding obligations as a new permanent fund. Thirty-nine thousand five hundred dollars of State bonds were actually purchased for the fund; but, unfortunately, this act was repealed in 1889, from which time to the present all proceeds from the school lands have been turned into the State treasury and used for miscellaneous expenses, the perpetual paper fund being increased by these amounts.

But the bad stewardship did not cease with the early failures. Through bad management down through the years the lands were frittered away. Some lands were sold and never fully paid for; others that had never been sold had gone into the possession of private and corporate interests, which have generally succeeded in securing title through action of the statute of limitations. To-day the State has clear title to only about 135,000 acres of school land; 118,000 of this being sixteenth sections, and most of the rest, indemnity land.

Much of the 16,000 acres of indemnity land now owned by the State, is valuable coal lands. Some small areas of marketable timber have also been spared to the State. In addition, rentals of considerable consequence could be collected from school lands now under cultivation, but of which no record is being kept.

While much has been lost, it is not yet too late for the State to discharge the trust imposed in it, in relation to the land funds. The \$2,800,000 now in the paper fund, and the surplus revenue fund (1886) amounting to \$670,000, also changed into interest-bearing notes, if converted into productive funds, together with the incomes from sales, rents, and royalties on the lands still intact, could, in time, produce for the schools of the State an endowment of considerable importance.

It is the conviction of the survey committee that the Legislature of Alabama should take the necessary steps to clear up this obligation without delay, by setting aside annually for a period of years a certain sum of money from the general treasury or other source, until the obligation is fully liquidated—these funds to be administered and invested in gilt-edge State and Federal securities by a State board, of which the State superintendent of education shall be the chairman.

2. *Legislative appropriations.*—Under section 260 of Article XIV of the constitution of Alabama, "it shall be the duty of the legislature to increase the public-school fund from time to time, as the necessity therefor and the condition of the treasury and the resources of the State may justify." In accordance herewith the legislature has provided a possible \$600,000 for this purpose, of which \$350,000 has been appropriated. As soon as the State adopts a

full 60 per cent tax basis, there will be no difficulty about releasing all of this fund, and, if it shall be deemed advisable, to increase it substantially.

3. *The constitutional 3-mill tax.*—This tax has been the chief source of revenue for the public schools from the time the State school system was established. The estimated income from this tax for 1919-20 is \$1,950,000 in a total of \$2,479,588 for the entire general education fund. The constitution further stipulates that this fund must be used for the payment of salaries of teachers, principals, supervisors, and superintendents of schools. This mandate was wholly sound at the time the constitution was adopted, because salaries of instructors are the chief source of outlay in operating a school system; but with the adoption of the county and district millage taxes, conditions are becoming materially changed in this respect, as set forth in a succeeding paragraph, and the time will probably soon be here when this paragraph of the constitution can be modified so as to place the main burden of school maintenance on the county and district, which would release much of the State fund (particularly the legislative appropriation) to be used for awarding exceptional educational enterprise and helping poor districts.

4. *County and district millage taxes.*—The greatest single forward stride in the Alabama school system has resulted from the adoption of the amendment to the constitution voted in November, 1916. It is now possible to vote a county tax not exceeding 4 mills and a district tax of not exceeding 3 mills on the dollar. While it would have been highly desirable not to have placed so low a maximum on this tax, it is felt that with a fair legal assessment and normal increase from year to year in the State's resources, this tax will help immensely in establishing the school system on a firm footing and in adding the local initiative that has been long wanting.

During the years 1917 and 1918, 54 counties have voted the county tax and a large number of local districts have accepted a similar obligation. This is the best evidence that the people of the State have fully accepted the principle of equal responsibility in the education of all the children of the Commonwealth. It is well to observe again that no district tax may be levied until after a county millage tax has been voted. This is to safeguard the poorer sections of the county and give them the benefit of sharing in the wealth of richer corporate and other interests, all of which is eminently fair. The total county millage tax for 1917-18 was \$1,854,119.72.

The plan for equalizing taxation over the State eminently fair.—It is a well-established principle in American democracy that the entire wealth of the State should be utilized to equalize educational advantages among all the children of the Commonwealth. Ignorance

or inefficiency in the local community is reflected on the entire Commonwealth and eventually levies a heavy burden on it for penal and corrective institutions. In this respect, Alabama has done well, as the 3-mill constitutional tax is levied on city and country alike for the benefit of all the people wheresoever they may dwell in the State. But the method in vogue for apportioning the State tax is, unfortunately, neither democratic nor equitable, as will appear later.

In a similar way, it is agreed by thoughtful leaders in the educational profession that local taxation is absolutely necessary to foster and keep alive local interest in school affairs, and to develop local initiative and independence. Local taxation is new in the State, and former want of this kind of support has unquestionably done more to retard the policy of education at public expense than all other factors combined.

It is generally agreed, and it is an accepted principle of the United States Bureau of Education, that the State should provide funds equivalent to about one-third of the required funds, to be used for general maintenance, and particularly as an award to encourage the community to greater efficiency in education; that the county taxes should be used chiefly for general school maintenance; and the district taxes for such extraordinary outlays as new sites, buildings, equipment, etc.

The survey committee believes that, in Alabama, the present State three-mill tax may well continue to be used for general maintenance, although the legislative appropriations should be placed at the immediate disposal of the State department of education (or State board of education) to be used solely to encourage outstanding educational endeavor, such as organizing the right type of consolidated schools and rural high schools, teacher-training institutions for white teachers, and county training schools for colored teachers, and similar forward-looking educational work.

How the State general fund is apportioned.—The method of apportioning the State general fund is, in practice, wholly unfair. The constitution provides that "the public-school fund shall be apportioned to the several counties in proportion to the number of school children of school age therein, and shall be so apportioned to the schools in the districts or townships in the county as to provide, as nearly as practicable, school terms of equal duration in such school districts or townships." This well-intentioned section of the State's constitution has failed wholly in its purpose and has in the end militated as strongly against the white school children—which it was intended to protect—as against the colored children.

1. It is based on school population, which in Alabama means all persons over 7 years of age and under 21 years—many of whom are

beyond reach of the schools and should not be included as a basis of apportionment.

2. It has failed to provide terms of equal duration in the several counties and districts, for either white or colored children.

3. It has made it possible for county boards of education in the black-belt counties to utilize these funds locally in such a manner as to make county and district taxation unnecessary, thereby, to all practical purposes, obliging (a) the white population in other counties to maintain the white schools in the black-belt counties, while (b) the colored schools in the same counties were being discriminated against in a most flagrant manner.

These methods explained in greater detail.—1. Distribution of State school funds should always be based on the principle that educational achievement in a given school community, as an example for emulation, is deserving of genuine encouragement and reward. Thus to distribute the State funds on the arbitrary basis of so-called school population—persons between 7 and 21 years of age, whether they are in school or not—is a doubtful practice; but to make the apportionment on the basis of actual school attendance would be to reward effort in a worthy way. For example, of what profit is it to Alabama to maintain a comparatively expensive school plant and teaching force when only 69 per cent of the school population are enrolled in these schools, and only 37 per cent of the school population actually attend these schools regularly? Under these conditions, why should the State distribute its bounties on a population basis, only 37 per cent of which make use of the schools?

A much more satisfactory basis would be to place the apportionment in part on the aggregate daily attendance in all the schools in a county and in part on the number of teachers employed—the former, because this would induce people to send their children to school so that the community might reap the benefit; the latter, because the chief cost of a school system is proportioned directly on the number of teachers employed.

2. A casual glance at the school attendance table demonstrates emphatically that the present system of apportioning the State funds has failed “to provide terms of equal duration in the several counties and districts;” chiefly because the State surrenders control of the funds the moment they are turned over to the county boards of education.

Barbour, Bullock, Dallas, Lowndes, and Sumter Counties have not yet voted the new 3-mill county tax, and Cleburne and Tallapoosa get along with the one 1-mill county tax. Table 94 further shows graphically that every one of these counties expends less than \$5 per capita on its school population. Still, most of them rank quite high in the

length of term and expenditure on the enrollment basis. How can this be? It is useless to hide the truth. Only by facing facts as they are and clearing up this injustice can the educational solvency of these counties be maintained. Here, and to a lesser degree in some adjacent counties, the State funds—apportioned on the basis of the whole white and colored population—are reapportioned so that the comparatively small white school population gets an unusually large proportion of the fund, and the comparatively large colored school population gets an unusually small share of the fund.

The results of this practice on the colored children as described in Chapter IX are wholly without defense on the grounds of the "as nearly as practicable" clause in the constitution. For in these counties the colored population is almost wholly deprived of public school support, being obliged to depend largely on private subscriptions and donations. The thinking people of Alabama are opposed to these local practices. They should no longer be tolerated.

But this is not all. This method of distribution also works a flagrant discrimination against the white school population of the State at large. These seven counties actually maintain their schools for the greater part at the expense of other Alabamians, since their only tax is a small State levy. Could there be a greater commentary on the unjust procedure than the following statement of facts? In 1916 the Alabama State department of education made a comparative study of the 67 counties in the State, ranking them in accordance with nine specific educational features. In this classification, Bullock and Dallas Counties received, respectively, first and second place; Sumter was number five, and Lowndes was number seven, and, be it remembered, these were the counties that were depending on the bounties from the State at large for their ranking!

A fair plan for distributing the State funds.—Alabama can not afford to continue the present plan of apportioning its State funds. They should be used (1) for all the children attending school; (2) as an award for good work well done; and (3) for the schools that need help the most.

The survey committee is convinced that these ends can be best served, if not to exceed one-half of the State fund were apportioned on the aggregate daily attendance of school children in each school in the county, and the total number of teachers employed; and the balance of the fund were entrusted to the State department of education (State board of education) for apportionment to the schools of the State as rewards for good work, and as direct help for needy, struggling communities. This would be both democratic and just. Such a readjustment would call for an amendment to the State constitution.

Dividing State and county funds between county and city boards of education.—It is wholly just that all the property within the bounds of the county shall be used for the education of all its children, regardless whether they live in city or open country. In counties with large industrial centers of great wealth, these cities invariably pay into the county funds more than they get back; but this, too, is eminently just, when one takes into consideration that the cities are always built at the expense of the open country whose best blood they draw upon and whose ability to produce wealth they thereby reduce. Again, if the cities use a portion of their wealth to aid in educating the rural population, they will ultimately profit by receiving from the country a more intelligent citizenship.

But the present system, or lack of system followed in dividing the State and county taxes between county and city schools, is not satisfactory and should be remedied by law. The county boards of education may now use their own discretion as to how the funds shall be divided. It is, of course, a matter of personal judgment largely, and based on actual needs of the school communities, under consideration. But the average county board has no exact knowledge of the actual needs of the incorporated cities whose school affairs are managed by local boards appointed by the city council. This has led to a bad practice. In some counties the funds have been divided on the half-and-half plan, which clearly gives the large city more than its share. In other places, there have been gentlemen's agreements of the boards that the division shall be on the basis of school population. This is a reasonable method of sharing, until a more equable plan can be initiated, which method would be the aggregate attendance-teacher basis outlined above. Finally, in some places, particularly in the towns and villages under county control, the present practice tends to discourage the people from voting local district taxes. There are many instances on record to show that the county boards have actually penalized such progressive communities by reducing their quota of county taxes immediately upon having voted a local tax to supplement this county portion.

The survey committee is convinced that this matter should be settled through legislative enactment—

1. To direct county boards of education to share the funds which pass through their hands with cities of more than 2,000 population having separate school boards on the basis of school population, until such time as an equable aggregate attendance teacher basis can be realized.

2. To safeguard local taxation from penalization by directing the county boards in every way to award and encourage local taxation by increasing or at least maintaining the rates of distribution in vogue at the time of voting the local tax.

Counties.	Amount paid into the State treasury by county under 3-mill consti- tutional tax for education.	Amount county receives from State for educational purposes.			Excess of amount re- ceived over amount paid into State treasury.	Excess of amount paid.
		State appro- priation.	Bonus.	Total.		
Adair	\$12,829.68	\$19,356.48	\$1,000	\$20,356.48	\$7,526.80	.....
Baldwin	23,997.45	20,943.78	3,000	23,943.78	46.33	.....
Barbour	17,724.22	36,279.10		36,279.10	18,544.88	.....
Bibb	15,397.64	24,135.54	3,000	27,135.54	11,737.90	.....
Blount	14,678.31	24,864.84	1,000	25,864.84	11,186.53	.....
Bollock	15,012.63	35,938.78		35,938.78	20,926.13	.....
Butler	17,818.34	35,869.94	1,000	36,869.94	18,871.60	.....
Calloway	46,705.65	44,561.66	3,000	47,561.66	855.01	.....
Chambers	24,661.34	40,729.26	3,000	43,729.26	19,067.92	.....
Cherokee	11,751.13	20,097.22		20,097.22	8,346.09	.....
Chilton	16,023.04	33,569.26	3,000	36,569.26	10,546.22	.....
Choctaw	12,586.82	21,650.20	1,000	22,650.20	10,113.38	.....
Clarke	14,473.91	31,485.60	1,000	32,485.60	18,012.69	.....
Clay	12,014.80	21,607.60	1,000	22,607.60	10,752.70	.....
Clayborne	7,892.34	15,953.94	1,000	14,953.94	6,961.60	.....
Codes	15,406.73	29,026.14	1,000	30,026.14	14,619.41	.....
Colbert	21,361.79	37,181.44	3,000	40,181.44	18,819.65	.....
Conecuh	14,642.38	33,162.02	3,000	36,162.02	11,543.64	.....
Cook	8,088.12	17,975.10	1,000	18,975.10	10,886.98	.....
Covington	24,280.68	37,806.34	3,000	40,806.34	16,525.71	.....
Crawshaw	11,179.17	23,783.76	1,000	24,783.76	13,604.59	.....
Cullman	21,200.09	31,528.64		31,528.64	10,328.55	.....
Dale	15,142.45	26,200.32	1,000	24,200.32	9,057.87	.....
Dallas	41,794.81	55,240.90		55,240.90	13,516.09	.....
DeKalb	15,640.67	31,896.12		31,896.12	13,225.45	.....
Elmore	16,694.83	30,230.20	3,000	33,230.20	16,605.37	.....
Etowah	21,427.58	22,062.04	3,000	25,062.04	3,634.46	.....
Fayette	37,781.96	36,673.92	3,000	39,673.92	4,891.94	.....
Franklin	10,785.39	19,989.92	1,000	20,989.92	10,174.39	.....
Geneva	12,017.24	19,485.18	3,000	22,485.18	9,467.94	.....
Greene	14,538.45	26,787.28	3,000	29,787.28	15,138.33	.....
Hale	11,802.74	18,674.20		18,674.20	7,201.46	.....
Henry	15,720.22	30,708.48		30,708.48	15,076.26	.....
Houston	10,688.33	31,703.98		31,703.98	10,715.65	.....
Jackson	28,037.26	33,396.32	1,000	34,396.32	11,332.96	.....
Jefferson	28,037.26	33,396.32		33,396.32	10,361.02	.....
Jordan	442,714.71	215,833.62	3,000	218,833.62	\$243,879.09	.....
Lamar	11,718.71	20,062.90	1,000	21,062.90	9,344.19	.....
Lauderdale	18,696.06	34,674.64	3,000	37,674.64	18,977.96	.....
Lawrence	12,000.96	23,143.81	1,000	24,143.81	12,142.83	.....
Lee	36,698.70	33,650.78		33,650.78	7,063.06	.....
Limestone	22,208.02	28,811.64	3,000	31,811.64	9,603.62	.....
Louisa	15,997.36	30,544.80		30,544.80	14,547.44	.....
Macon	14,468.76	26,074.62	1,000	27,074.62	12,605.86	.....
Madison	39,612.09	44,780.40	3,000	47,780.40	7,817.71	.....
Marengo	21,051.30	39,310.66	1,000	37,810.66	16,269.36	.....
Martin	13,177.06	21,707.40	1,000	22,707.40	10,530.34	.....
Marshall	15,478.63	30,446.70	3,000	33,446.70	19,078.08	

TABLE 96.—School population, enrollment, and expenditures by counties.

Counties.	School population.	Number enrolled.	Total expenditure for all purposes.	Average per pupil of school population.	Average per pupil enrolled.
Autauga	6,824	3,855	\$32,010	\$4.67	\$8.30
Baldwin	6,915	5,139	93,639	13.62	18.20
Barbour	12,028	6,408	49,230	4.09	7.68
Bibb	7,737	5,878	55,311	7.14	9.41
Blount	8,964	7,247	45,653	5.09	6.16
Bullock	11,071	5,312	45,482	4.10	8.55
Butler	10,065	7,670	60,317	5.98	7.86
Calhoun	16,919	9,976	122,960	7.20	12.22
Chambers	14,592	9,844	164,185	11.25	16.67
Cherokee	7,218	5,516	32,548	4.50	5.90
Chilton	7,635	6,400	56,522	7.44	9.31
Choctaw	7,089	4,984	32,621	4.61	6.56
Clarke	9,450	5,804	49,279	5.21	8.79
Clay	7,728	6,351	50,341	6.51	7.92
Cleburne	4,654	3,912	20,924	4.49	5.09
Coffey	10,430	7,743	54,144	5.19	4.99
Colbert	10,033	6,920	72,190	7.19	10.57
Conocochee	8,408	6,706	67,257	6.80	8.83
Coosa	5,127	4,345	28,219	6.50	6.49
Cornington	11,873	9,946	92,428	7.70	9.29
Crenshaw	8,322	5,720	47,650	5.72	8.33
Cullman	9,204	9,204	61,967	5.46	6.73
Dale	5,328	5,328	51,351	6.50	9.63
Dallas	9,374	9,374	89,948	4.95	8.78
De Kalb	11,835	9,130	66,229	5.59	7.25
Elmore	9,900	6,810	69,109	6.96	10.14
Escambia	8,058	6,044	83,589	10.37	13.88
Etowah	14,263	11,301	124,668	8.74	11.08
Fayette	5,957	5,825	34,507	5.79	6.24
Franklin	7,201	5,244	52,852	7.33	10.07
Geneva	9,778	9,677	69,252	7.08	7.15
Greene	5,607	2,228	22,946	4.09	10.29
Hale	9,324	5,084	39,972	4.28	7.88
Henry	7,051	4,856	35,035	4.68	6.80
Houston	11,155	10,590	97,446	8.73	9.20
Jackson	11,866	8,248	59,646	4.27	6.08
Jefferson	89,654	59,711	1,281,239	14.41	21.45
Lamar	6,507	5,953	35,368	5.43	5.94
Lauderdale	14,516	10,675	142,048	9.78	12.43
Lawrence	7,827	6,177	39,606	5.06	6.41
Lee	10,771	6,200	62,586	5.81	10.09
Limestone	10,373	7,555	71,599	6.90	9.47
Lowndes	9,805	4,600	34,796	3.54	7.46
Macon	8,649	5,721	39,651	4.50	6.92
Madison	15,522	12,142	138,016	8.44	11.30
Marion	12,380	5,896	59,088	4.78	10.02
Marshall	7,503	6,981	36,616	4.80	5.17
Marshall	11,249	9,161	61,709	5.45	6.66
Mobile	23,033	15,334	336,940	14.82	21.22
Monroe	9,430	6,883	81,612	5.64	11.85
Montgomery	27,219	18,781	263,817	9.69	17.35
Morgan	12,067	9,384	107,266	8.89	11.45
Perry	9,310	6,055	49,090	4.80	6.62
Pickens	9,380	7,544	62,438	6.67	8.14
Pike	10,484	9,213	100,479	9.58	10.60
Randolph	9,627	8,156	65,163	6.76	7.98
Russell	9,319	2,590	36,962	3.96	14.23
Shelby	8,580	6,836	72,564	8.44	10.61
St. Clair	8,203	6,776	75,906	9.13	11.20
Sumter	12,039	4,227	39,297	3.26	6.29
Talladega	12,684	10,771	99,630	7.76	9.34
Tallapoosa	10,230	10,137	61,340	5.99	6.08
Tuscaloosa	16,084	12,367	111,929	6.98	9.13
Walker	14,278	12,983	128,776	9.01	9.91
Washington	5,065	3,616	38,584	7.61	10.67
Wilcox	10,845	4,482	45,236	4.17	10.09
Winston	4,947	2,439	31,409	6.25	12.98

Alabama's ability to invest more liberally in public school education unchallenged.—It is quite evident from all that has been said above that Alabama's greatest educational problem is written in the two words—school support. While some headway is being made

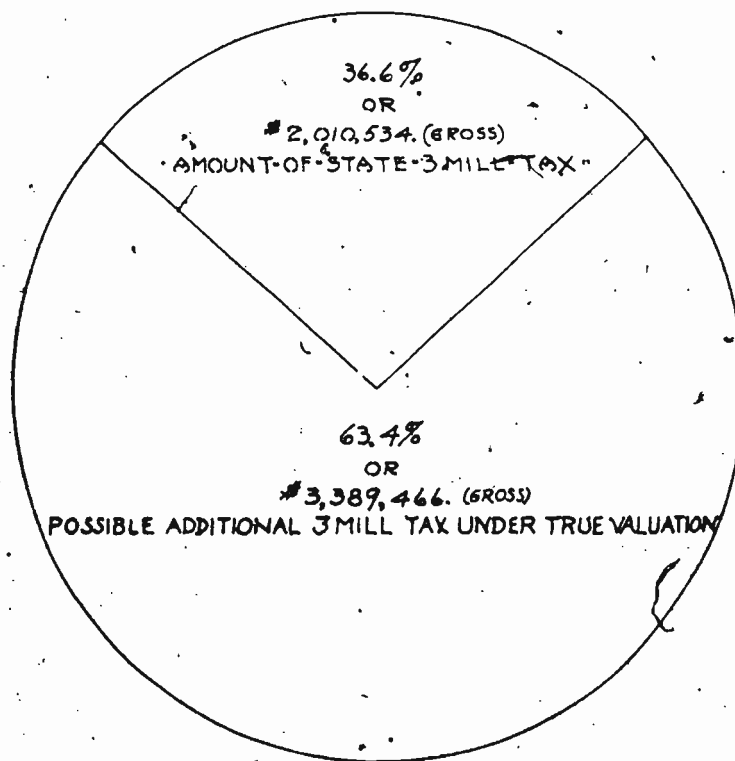
in school support, public-school taxation is, comparatively speaking, so new in the State that many of the public—particularly those persons who have been educated in private institutions—hardly yet

• ASSESSED VALUATION OF ALL TAXABLE PROPERTY •
• IN ALABAMA 1918 •

\$ 670,178,000.

• ESTIMATED TRUE VALUATION OF ALL TAXABLE •
• PROPERTY IN ALABAMA 1918 •

\$ 3,000,000,000.



■ USED



○ NOT USED

FIG. 48.

realize their full responsibility and opportunity in this matter. In such counties as Jefferson, Mobile, and Montgomery, with sufficient funds at their disposal, rural as well as urban schools are being rebuilt and are becoming as excellent as can be found anywhere. These

schools are already reacting favorably on the agricultural and industrial prosperity of their several communities. Other counties are less well situated, because they lack ample funds for such progressive enterprises.

Alabama is just passing from an old order of things, and is only just beginning to utilize the abundant riches lying latent in its soil, and rock and water. The first step toward full utilization of this wealth must be a liberal investment in training for leadership in these several fields of activity. That Alabama is amply able to do more for education was shown in Chapter I. Only the briefest reference to its financial ability is therefore necessary.

The following table gives the true and assessed valuation of Alabama property by decades since 1880:

TABLE 97.—True and assessed valuation of Alabama property.¹

Year.	Estimated true value of all taxable property by United States Census Bureau.	Same per inhabitant.	Assessed value of all taxable property.	Assessed valuation. What percent of true value.
1880.....	\$428,000,000	4339	\$122,867,000	28
1890.....	622,800,000	411	258,980,000	42
1900.....	774,700,000	431	420,000,000	54
1910.....	1,825,000,000	854	420,000,000	23
1912.....	2,127,000,000	912	656,807,000	31
1918.....	3,000,000,000	1,250	670,178,000	22

¹ Social problems in Alabama. New York, Russell Sage Foundation, p. 7.

² Estimate based on the increase from 1900 to 1912.

The Russell Sage Foundation in a special study of Alabama social problems shows that the United States taxes have increased in the State from \$463,000 in 1914 to approximately \$30,000,000 in 1919. "If Alabama," continues the report, "could cheerfully meet the increase of taxes for Uncle Sam sixtyfold in four years, she can certainly make some increase for her own people now that national taxes are to be reduced." Certainly, Alabama is able to pay its own way and pay it well.

Alabama's social interests jeopardized.—It is not overstating facts to say that unless substantial financial relief is soon extended to education, this State will suffer great impairment through a lowering of standards and quality of school work. Conditions were bad enough before the world war; but they have become increasingly serious since then. The administrative and teaching staffs of the State's higher educational institutions, and the instructors of the teacher-training institutions and the public schools of every kind have struggled along on salaries that are wholly inadequate, and which are actually forcing many of Alabama's most efficient teachers to seek other employment or to accept teaching positions in other

States. The public schools need several thousand more trained teachers. Thousands of teachers have left the profession because they literally could not make financial ends meet. Much of the public-school plant is worn out and insanitary; the higher institutions are in need of equipment and money for urgently needed expansion. The State can not afford to permit the work that has resulted from years of planning and building in the educational life of Alabama to be endangered for lack of such funds as can be provided if the legislature will apply the remedies that are available.

How to remedy the situation.—A serious effort to reorganize the school finances should consider the following factors as essential to a just and democratic solution:

1. Enforcement of section 9 of the revenue code.
2. Legal enactment to place the assessment of all property in the hands of the State government.
3. Provision for equable inheritance and income taxes.
4. Legal enactment to provide for a searching study of the entire subject of taxation by experts.

The constitution of Alabama states specifically that "the income arising from the sixteenth section trust fund, the surplus revenue fund, until it is called for by the United States Government, and the funds enumerated in section 258 of this constitution, together with a special annual tax of 30 cents on each \$100 of taxable property in the State, which the legislature shall levy, shall be applied to the support and maintenance of the public schools." This seems to mean full value assessment. A law was, however, later enacted basing the assessment of 60 per cent of a full and fair valuation. This law has been upheld as constitutional. But it is clearly evident from what has been shown elsewhere in this discussion that even the 60 per cent valuation clause is not enforced. If the suggestions made by the survey committee should be adopted the available revenue for education would be increased between two and three fold. This would satisfy every educational need in the State for years to come.

To this end, it would be necessary to reorganize the present agencies intrusted with the important task of property assessment. This would be made primarily a State function, under immediate direction of the governor of the State. Local property assessment should be directed by State assessors, and no local assessor should be an inhabitant of the county or community to be assessed by him. Suitable penalties should be provided to insure strict compliance with the law. Such tax commissions have already demonstrated in many States that it is possible to enforce a fair and equable system of taxation on rich and poor alike, instead of the unfair and undemocratic system now utilized in Alabama.

Income and inheritance taxes have already proved a most satisfactory measure at the hands of the Federal Government and certain State governments, for equalizing the tax burdens of the people. Most of the large incomes in the State are amassed from the riches of the public domain, as coal and iron, and water power. These and similar income-producing agencies should be taxed liberally in justice to the State at large.

Inheritances should also be taxed. Perhaps the most important of these in Alabama are inherited landed estates. Thousands of such large plantations lie practically fallow—held for speculative purposes. These great areas should be forced into productivity by placing upon them a "speculative lands' tax" similar to that of an act recently passed by the legislature of North Dakota, and, in addition thereto, an inheritance tax, if the land falls in this class.

The survey commission's attention has been called to many instances of flagrant abuse of the tax law, chiefly in relation to assessment of values. Coal and iron lands that are bonded for millions of dollars are known to have been assessed as agricultural lands at the paltry valuation of a few thousand dollars. Farms that were recently sold at a good price are listed on the tax books at less than one-tenth of this value. Such cases, unfortunately, are not isolated instances of a vicious practice, but are part of a common system. It is accordingly recommended that a scientific study of the whole field of taxation be made by experts who shall propose to the State an equitable basis for listing and assessing property and apportioning the tax burden among all its citizens.

The recommendations summarized.—The survey committee is convinced that the stability and future growth of the public school system in Alabama demand certain definite modifications in the prevailing system of school support. To this end it recommends:

1. The reestablishment of a permanent productive educational fund, through the conversion of the accumulated paper obligations, by setting aside annually for a period of years a certain sum of money from the general treasury of the State or other source, until the obligation is fully liquidated. To this shall be added from time to time all incomes from rents, sales, royalties, etc., on the unsold lands now belonging to the schools of the State. These funds shall be administered and invested in State and Federal securities by a State board of which the State superintendent of education shall be the chairman.

2. The release of the \$250,000 withheld from the present legislative appropriation of \$600,000, at the earliest moment that the condition of the treasury will justify.

3. The passage of an amendment to the State constitution to provide a new basis on which to distribute the general educational fund,

as follows: (a) One-half of the entire fund to be apportioned to the several counties, two-thirds of this one-half on the basis of aggregate daily attendance in all the schools of the county, figured on the attendance records for the year last preceding, and one-third of this one-half on the total number of teachers employed in the county; and (b) the remaining one-half of the fund to be entrusted to the State department of education (State board of education) for apportionment among the schools of the State as awards for good work, and as direct aid to needy school districts.

4. The reapportionment of all State and county school funds by the county boards of education between county and city schools, on the principle of aggregate daily attendance and the number of teachers employed, and in no other way whatever; provided, that the basis of total school population shall be used in case the legislature fails to pass on the attendance principle.

5. The discontinuance of the nine district agricultural schools and the establishment in their stead of six new agricultural schools of secondary rank, to receive State support to the amount of not less than \$20,000 per annum.

6. The passage of the necessary legislation to permit all incorporated school districts of 1,000 population and over to issue bonds for extraordinary school purposes.

7. The adoption, by constitutional amendment, of a permanent millage tax for the maintenance of the University of Alabama, the Alabama Polytechnic Institute, the Alabama Girls' Technical Institute, the four class A normal schools, and such other normal schools as may hereafter be established, and the A. & M. College for Negroes—to be apportioned according to the needs of each institution, to supplant the present legislative appropriations—all of which, however, shall be in addition to all incomes on endowments, trust funds, etc., which may now form a definite part of the support of one or all of these schools.

8. The increase of the annual State appropriation to county high schools from \$3,000 to a minimum of \$4,000, provided that no such school shall hereafter receive any State aid whatever unless the State money is duplicated dollar for dollar from county funds.

9. The increase of State support for the colored normal schools, and direct State support for county training schools for colored teachers.

10. The reorganization of the school finances by (a) strict enforcement of section 9 of the Revenue Code; (b) legal enactment to place the assessment of all property under direct control of the State government; (c) provision for equable income and inheritance taxes, and (d) provisions for a searching study of the entire subject of taxation in the State.

Chapter XXIV.

SUMMARY OF THE MOST IMPORTANT RECOMMENDATIONS CONTAINED IN THE FOREGOING CHAPTERS.

The outstanding needs of the Alabama school system may be summarized under three heads:

1. Greatly increased school support.
2. More efficient instructional and supervisory staff.
3. Better adjustment of all teaching agencies.

The general plans for improvement of the school system are embodied in the following legislative and administrative recommendations concerning:

1. State School Organization and Administration.

- (a) Organization of a State Board of Education to have full charge and control of all public elementary schools and such other schools as are included in the discussions of the foregoing chapters, except the University of Alabama, the Alabama Polytechnic Institute, and the Alabama Girls' Technical Institute.
- (b) Appointment of the State Superintendent of Education by the new State board of education.
- (c) Enlargement of the powers and duties of the State superintendent and State board of education in agreement with the details set forth in foregoing chapters.
- (d) Organization of a State Council of Education to consist of members from the State board of education and of the faculties of the State's higher institutions of learning, with powers and duties as prescribed in foregoing chapters.
- (e) Passage of such amendments to the constitution of Alabama as may be necessary to consummate the changes prescribed in foregoing chapters.

2. County Supervision of Schools.

- (a) Requirement that all candidates for county superintendent, not including the present incumbents, shall hold at the time of the appointment to office a professional county superintendent's certificate. Such certificates shall be issued by the State department of schools on

2. County Supervision of Schools—Continued.

the basis of minimum academic and professional qualifications equivalent to graduation from the standard (class 'A) normal schools of the State, and at least three years' successful experience as teacher or supervisor in this or other States; ample evidence that the candidate (1) is an able administrator, (2) has strong personality and good character, (3) and has exceptional professional spirit.

- (b) Requirement that no person shall hereafter be appointed as assistant superintendent or subject supervisor who does not hold a State professional certificate, valid in Alabama.
- (c) Appointment of an assistant county superintendent in each county employing 100 or more teachers, and a subject supervisor in each county for every 40 teachers or fraction thereof.
- (d) Maintenance of high standards among the county superintendents and their assistants—
 - (1) By holding an annual "school" of one week's duration under charge of the State superintendent for all the county superintendents; attendance to be made mandatory and all traveling and living expenses to be defrayed from county educational funds.
 - (2) By granting county superintendents and their assistants leave at full pay to attend summer school every second or third year.
 - (3) By furnishing at State expense each county superintendent for his own use, or the use of his assistants, one-half dozen or more of the leading educational books of the year.
- (e) Amendment of the present county board law to provide for separate boards of education in towns and cities of more than 1,000 population, not already provided for; and the right of such places to issue bonds for extraordinary educational purposes.

3. School Population, Enrollment, and Attendance.

- (a) Legal school age to include all children between 6 and 18 years, inclusive, but no person older than 18 years should be excluded from school.
- (b) School entrance age to be changed from 7 years to 6 years.
- (c) Provision for apportioning the State school fund on some basis other than the school population.

3. School Population, Enrollment, and Attendance—Continued.

- (d) Provision for a chief attendance officer as member of the State department of education.
- (e) Changes in the compulsory attendance law as follows:
 - (1) Removal of the 80-day and 60-day attendance minimum and requirement that normal children attend school throughout the regularly provided school term.
 - (2) Issuance of work permits only to pupils who have completed the fourth grade and can furnish satisfactory evidence thereof.
 - (3) The safeguarding of the law by limiting its exemptions as prescribed in Chapter VI.
- (f) The perfection and use of a system of records by the State department of education for transferring pupils from community to community to make evasion of school attendance impossible.
- (g) The lengthening of the school year for white children to 9 months and for colored children to a minimum of 6 months.
- (h) The gradual reorganization of all schools as "all-year" schools in charge of professional teachers.

4. Rural Schools.

- (a) School consolidation encouraged through State aid.
- (b) Employment of assistants to the county superintendent in the supervision of rural schools. A State bonus from the State for each supervisor provided not exceeding one-third of the total salary, the remainder to be paid by the county board of education.
- (c) Minimum qualifications for teachers, educational and professional, to be established through the enactment of the minimum salary law recommended in chapter 18.
- (d) Approval of all school sites, size of grounds, kind of building and equipment by the State school architect appointed by and acting under the direction of the State board of education.
- (e) The reorganization by the State board of education of the school system on the 6-3-3 plan.

5. Negro Education in Rural Sections.

- (a) Apportionment of a larger share of the public school funds to Negro schools.
- (b) Such increase of salaries of Negro teachers as will encourage persons of ability to enter and remain in the service of the schools.

5. Negro Education in Rural Sections—Continued.

- (c) Increase in the number of Negro teachers to secure a better ratio of teachers to pupils.
- (d) The enforcement of the compulsory education laws to apply to all children of school age, both white and colored.
- (e) Provision of State aid for county training schools on the basis of \$750 for each school to match the \$750 appropriated by the county board of education for maintenance of this kind of school.
- (f) Increase of State appropriation to the Agricultural and Mechanical College to the amount of the Federal Government's aid, and provision for modern dormitories and an academic building.
- (g) Provision for the eventual removal of the State normal school at Montgomery, and its relocation on a tract of at least 150 acres of land.
- (h) If the State finds it undesirable to carry out recommendations (f) and (g), the two schools to be consolidated and an agricultural and mechanical normal school to be established instead at such place as will be most accessible to the large body of the Negro population of the State; the school to have at least 150 acres of good agricultural land and ample provision for boarding and lodging these students.

6. Village and Town Schools.

- (a) Continuance of the present plan of placing towns of less than 2,000 population under the control and management of the county board of education.
- (b) Encouragement of the levy of local taxes in all village and town districts to enable the school board to discontinue the practice of charging tuition fees.
- (c) Limiting the smaller village to 9 grades of school work. Organization of the seventh, eighth, and ninth grades as junior high school. Organization of the larger town schools on the 6-3-3 plan.

7. District Agricultural Schools and County High Schools.

- (a) Discontinuance of State appropriations to the schools at Jackson, Abbeville, Sylacauga, Athens, and Wetumpka, and return of the property of these schools to the local authorities; or
- (b) Maintenance hereafter of only four agricultural schools of secondary rank to be located at the present sites of the district agricultural schools at Hamilton, Albert-

7. District Agricultural Schools and County High Schools—Contd.
ville, Blountsville, and Evergreen, or their relocation
on bids from suitable communities from the State
at large.

- (c) Provision of a State appropriation for each of these schools of not less than \$20,000 per annum.
- (d) The increase of State aid to county high schools to a minimum of \$4,000 per annum, provided that no such school shall receive any aid from the State which is not duplicated dollar for dollar from county or local funds.
- (e) The discontinuance of the State appropriation now made to the Northeast Alabama Agricultural Institute at Lineville, with provision for turning the school property over to the local community.

8. City Schools.

(a) Such enlargements of the scope and power of city boards of education as will enable them—

- (1) To call elections for the issuance of school bonds and the levying of local taxes.
- (2) To purchase school sites, approve building plans, and erect buildings.

(b) Provision by which money furnished by the State to the city schools shall be—

- (1) Sent directly to the city school boards.
- (2) Apportioned on some definite basis, in order that the city may have a clear idea from year to year regarding the amount of financial help it will receive from the State.

(c) Taxation to the legal limit for school support in all cities which have not already reached this limit.

(d) Provision for the increase of property assessments until they shall at least reach the percentage of value provided for in the statute on that subject.

(e) The abolition by law of the practice of charging fees for attendance at public schools.

(f) Substantial increase in the salaries of teachers in every city of the State.

(g) Greater freedom to city boards in the matter of selecting textbooks suited to the special needs of city schools.

(h) Provision that all public school buildings in cities shall be—

- (1) Built as nearly fireproof as is practicable.
- (2) Built with reference to the best and most modern ideas of heating, lighting, and ventilation.
- (3) Built with auditoriums or assembly rooms.

8. City Schools—Continued.

(A) Provision that all public school buildings in cities shall be—Continued.

- (4) Built on the unit type, so that they can be added to as need arises.
- (5) Constructed with due reference to the widest possible use by the community as a whole.
- (6) Situated on 5 acres of school ground, in the case of an elementary school, or on 10 acres in case of a high school, and in no case on less than a full city block.
- (7) Made as attractive as possible by design, by careful upkeep, and by such devices as flowers, window-boxes, etc.
- (8) Designed after consideration has been given to the one-story type of school architecture for elementary schools.
- (9) Equipped with movable tables and chairs in first-grade rooms and with movable desk chairs in high schools.

(i) Provision in the course of study for:

- (1) A greater amount of physical training.
- (2) Greater stress on education in health subjects.
- (3) Greater flexibility to meet the demands of the individual child.
- (4) Greater flexibility to meet the needs of different communities.
- (5) More industrial work, preferably in cooperation with mills, or other predominant local industries.

(j) Promotion.

- (1) Semiannually or oftener.
- (2) Upon a basis including more than mere standing upon written examinations.
- (3) In high schools, by subjects instead of by grades.

(k) Extension of the compulsory attendance period to cover the entire school year, and better enforcement of the law.

(l) Better and more provision for activities along school extension lines, including night schools, afternoon classes, part-time schools, etc.

(m) Lowering of the legal entrance age from 7 to 6 years.

(n) Reorganization of the State course of study upon the 6-3-3 basis.

8. City Schools—Continued.

(o) Provision that schools for Negroes should:

- (1) Have a term of not less than six months.
- (2) Be housed in buildings that are safe, decent, sanitary, clean, comfortable, and sufficient in number.
- (3) Provide adequate instruction in reading, writing, and arithmetic, and in such of the industries as the pupils will have the opportunity to engage in advantageously in after life.
- (4) Pay their teachers enough to induce them to make proper preparation for their work.

(p) Legal provision for greater uniformity in the constitution of city boards of education. It is suggested that these boards shall consist of 7 members, each appointed or selected from the city at large. If not elected by the people, members of these boards should be appointed by the mayor and confirmed by the board of aldermen. They should hold office for a term of 7 years, the term of 1 member expiring each year. Members of boards should be so selected as to make sure that all classes of citizens and all the main industrial and professional interests are represented.

9. Schools for Defectives and Delinquents.

- (a) Organization of a State Board of Social Welfare to have charge of all child-caring institutions in Alabama.
- (b) Direction of all the educational work of the child-caring institutions to be under the management of the State board of education, or State department of education, which shall maintain a specific division for this purpose.
- (c) Immediate establishment of a school for feeble-minded children.
- (d) Substantial increase in per capita support of all these institutions and liberal funds for enlargement and repairs.

10. Eradication of Illiteracy.

(a) Strengthening the compulsory attendance law in accordance with recommendations in Chapter VI;

(b) Enactment of legislation to promote Americanization by requiring school attendance of all persons above compulsory attendance age, and below 21 years, who do not now speak, read, and write the English language, until completion of the fourth grade of the public schools or an equivalent requirement.

- (1) Provision for the establishment and maintenance of evening schools and part-time schools for this purpose under the direct supervision of the State department of education.

10. Eradication of Illiteracy—Continued.

- (c) Enactment of legislation to encourage effective illiteracy work among adults under direction of the State department of education, and maintained by funds voted by the legislature.
- (d) Appropriation of not less than \$25,000 annually for the next quadrennium for the purpose of making such legislation effective.

11. Health and Physical Education.

- (a) Establishment of distinct fields of activities defining and recognizing the functions of the boards of education and health, respectively.
- (b) Employment of a school health supervisor by each county board of education upon a 12 months' basis.
- (c) The organization, supervision, and direction of health and physical education in the several counties by a State health supervisor, working under the direction of the State board of education.
- (d) The enactment of a modern physical education law for the State in accordance with suggestive legislation outlined in Chapter XVI.

12. School and Home Gardening.

13. Teachers and Their Certification.

(a) Improvement of teaching conditions by—

- (1) Establishing reasonably minimum salaries for all teachers;
- (2) Scaling all teachers' salaries to the grade of certificate held, thus placing a premium on special preparation.

(b) Requirement of higher teaching qualifications by—

- (1) Increasing gradually the entrance requirements of the State normal schools and lengthening their study courses;
- (2) Discontinuing the issue of certificates on examination as soon as the normal schools, the Alabama Girls' Technical Institute, the school of education in the University of Alabama, department of education of the Alabama Polytechnic Institute, and other teacher-training institutions have become fully equipped to supply all the professional teachers required;
- (3) Placing the minimum requirement for permission to teach at graduation from an accredited four-year high school, or its equivalent, and, in

13. Teachers and Their Certification—Continued.

- (b) Requirement of higher teaching qualifications by—Contd.
addition, at least one year's professional study,
acquired at a professional school for teachers.
The standard to go into effect not before Sep-
tember, 1923.
- (c) Increase the supply of professional teachers by—
 - (1) Organizing teacher-training departments in the
county high schools and other accredited high
schools which meet the requirements of the
State department of education; the schools to
receive State aid.
 - (2) Establishing well-equipped departments for rural
teachers at all the normal schools.
 - (3) Enlarging the facilities of the Alabama Poly-
technic Institute to prepare teachers of general
agriculture and teachers of vocational agricul-
ture and home economics.
 - (4) Granting State bonuses to teachers as rewards
for long service in a single school community;
 - (5) Establishing a retirement fund for teachers.

14. Preparation of Public School Teachers.

- (a) Requirement of professional training as a prerequisite to
the issuance of teacher certificates, the standard to be
raised gradually to avoid teacher shortage, and protec-
tion to be afforded experienced and skilled teachers now
in service.
- (b) Requirements that members of boards of control of an in-
stitution be not residents of the county in which the in-
stitution is located.
- (c) The establishment of a pension and emeritus system for all
teachers.
- (d) The discontinuance of the class B normal schools, which
may profitably be converted into county high schools.
- (e) The accrediting of the State normal school (colored) at
Montgomery and Tuskegee Institute, the addition of a
school, farm buildings, and equipment for the former,
and increased appropriations for both.

15. Higher Education.

- (a) A large increase in the appropriations for the college of
agriculture of the Alabama Polytechnic Institute.
- (b) Emphasis by the Alabama Polytechnic Institute on the
training of leaders in scientific agriculture and rural
life.

15. Higher Education—Continued.

- (c) The gradual differentiation of the programs of engineering education of the University of Alabama and the Alabama Polytechnic Institute as follows:
 - 1. Both institutions to continue to offer chemical, civil, electrical, and mechanical engineering.
 - 2. The University of Alabama to relate its work directly to the needs of the mining and industrial district, and to develop commercial and industrial engineering, hydraulic engineering, and sanitary engineering.
 - 3. The Alabama Polytechnic Institute to emphasize investigation and training in highway engineering, agricultural engineering, and textile engineering.
 - 4. The State council of education to determine the advisability of continuing degree curricula in architecture and architectural engineering.
- (d) Increased appropriations for the support of engineering education at both the Alabama Polytechnic Institute and the University of Alabama.
- (e) A large increase in the appropriations for the school of education of the University of Alabama, to provide additional instructors; the provision of an educational building; the provision of a practice school under the direction of the school of education; and the continuance of teacher training in trades and industries under the direction of this school.
- (f) An increase in the support of the school of agricultural education at the Alabama Polytechnic Institute, to cover practice-teaching facilities and additional instructors.
- (g) The appropriation of at least \$10,000 a year to both the University of Alabama and the Alabama Polytechnic Institute for the maintenance of summer schools.
- (h) The continued recognition of the graduates in home economics, music, and commercial branches of the Alabama Girls' Technical Institute as candidates for high-school positions in these subjects.
- (i) (1) The early abandonment of the attempt to continue for the present a four-year medical school in connection with the University of Alabama, and the transfer of the first two years of medical education from Mobile to Tuscaloosa. (2) Pending the time when the Mobile school can be legally discontinued, the strengthening of

15. Higher Education—Continued.

- the first three years of its work only. (3) The maintenance of two centers of postgraduate teaching in medicine, one at Mobile and one at Birmingham, and the proper support of these centers.
- (j) The concentration of education in pharmacy for the present at the Alabama Polytechnic Institute.
 - (k) Adequate appropriations for the support of the college of veterinary medicine at the Alabama Polytechnic Institute.
 - (l) The placing of the college of law of the University of Alabama on a standard basis, and the appropriation of sufficient money for its support.
 - (m) The approval of the estimates for work in commerce at the University of Alabama, and a study of the needs in higher commercial training by the State council of education.
 - (n) The establishment of a department of forestry at the Alabama Polytechnic Institute.
 - (o) (1) The establishment of a division of home economics at the Alabama Polytechnic Institute, and the transfer to that institution of the Smith-Hughes work in the training of teachers of home economics and the consequent expansion of the school of agricultural education to include the training of teachers in home economics. (2) The abandonment of the plan to develop the Alabama Girls' Technical Institute into a four-year college of liberal arts for women, and the rehabilitation of its original program as a technical institute.
 - (p) The admission to the general course at the Alabama Polytechnic Institute of only such students as meet the full entrance requirements without conditions.
 - (q) Appropriations sufficient to cover an immediate increase of at least 50 per cent in instructional costs at the college of arts and sciences of the University of Alabama, together with provision for continued support to keep pace with anticipated growth in enrollments.
 - (r) The development of definite program of research by the University of Alabama and the Alabama Polytechnic Institute, and the inclusion of estimates to cover these programs in their future budgets.
 - (s) The assumption by the State of a larger financial responsibility for the program of agricultural extension of the Alabama Polytechnic Institute than is required to

15. Higher Education—Continued.

meet the terms of the Smith-Lever Act; and the approval of the estimate for university extension in the present budget of the University of Alabama.

- (t) The approval of the present budget of the Agricultural and Mechanical College for Negroes, and continued appropriations to enable it to develop effective training in agriculture and mechanic arts.
- (u) The creation of a State council of education; the future determination by it of State needs in the field of professional training, and the allocation of the different portions of the tasks of professional training among the several higher institutions in harmony with the foregoing definition of the spheres of these institutions.
- (v) The modification of the constitution to provide:
 - (1) For the appointment by the governor of members of the board of trustees of the University of Alabama.
 - (2) For lengthening the tenure of office of the members of the board of trustees of the Alabama Girls' Technical Institute to coincide with the tenure of the members of the governing boards of other State higher institutions.
- (w) (1) The reorganization of the plan of internal administration of the Alabama Polytechnic Institute. (2) The establishment of safeguards against faculty inbreeding at the Alabama Polytechnic Institute.
- (x) At both the University of Alabama and the Alabama Polytechnic Institute:
 - 1. A redistribution of the ratio of professors to instructors.
 - 2. The reduction of teaching and administrative loads of faculty members.
 - 3. The reduction in size of certain sections.
 - 4. The elimination as far as possible of very small classes.
 - 5. The establishment of 15 teaching hours as the maximum for a full-time instructor, and of 250 to 300 student clock hours as the normal average load.
 - 6. The establishment of temporary average salaries for deans at \$3,500; for full professors at \$3,000; and for associate and assistant professors at \$2,500.

15. Higher Education—Continued.

(a) At both the University of Alabama and the Alabama Polytechnic Institute—Continued.

7. The exclusion from admission to degree curricula of students from four-year high schools who present only 12 units.

(y) The enforcement by the State higher institutions of a uniform system of entrance requirements in harmony with the standards of the Association of Colleges and Secondary Schools of the Southern States; and the publication by the higher institutions of such classifications of students as will show plainly which are enrolled in special, irregular, or noncollegiate curricula, as differentiated from those pursuing regular curricula.

16. Financing the Public Schools.

(a) The reestablishment of a permanent productive educational fund, through the conversion of the accumulated paper obligations, by setting aside annually for a period of years a certain sum of money from the general treasury of the State or other source, until the obligation is fully liquidated. To this shall be added from time to time all incomes from rents, sales, royalties, etc., on the unsold lands now belonging to the schools of the State. The funds shall be administered and invested in State and Federal securities by a State board of which the State superintendent of education shall be the chairman.

(b) The release of the \$250,000, withheld from the present legislative appropriation of \$600,000, at the earliest moment that the condition of the treasury will justify.

(c) The passage of an amendment to the State Constitution to provide a new basis on which to distribute the General Educational Fund, as follows: (1) one-half of the entire fund to be apportioned to the several counties, two-thirds of this one-half on the basis of aggregate daily attendance in all the schools of the county, figured on the attendance records for the year last preceding, and one-third of this one-half on the total number of teachers employed in the county; and (2) the remaining one-half of the fund to be entrusted to the State department of education (State board of education) for apportionment among the schools of the State as awards for good work, and as direct aid to needy school districts.

16. Financing the Public Schools—Continued.

- (d) The reapportionment of all State and county school funds by the county boards of education between county and city schools, on the principle of aggregate daily attendance and the number of teachers employed, and in no other way whatever; provided, that the basis of total school population shall be used in case the legislature fails to pass on the attendance principle.
- (e) The withdrawal of State support from the five poorly functioning district agricultural schools and apportionment of these funds among the remaining four schools; or the withdrawal of State support from all the nine district agricultural schools and the reapportionment of these funds among the county high schools on the conditions outlined in Chapter XI.
- (f) The adoption, by constitutional amendment, of a permanent millage tax for the maintenance of the University of Alabama, the Alabama Polytechnic Institute, the Alabama Girls' Technical Institute, the four class A normal schools, and such other normal schools as may hereafter be established, and the Agricultural and Mechanical College for Negroes—to be apportioned according to the needs of each institution and to supplant the present legislative appropriations—all of which, however, shall be in addition to all incomes on endowments, trust funds, etc., which may now form a definite part of the support of one or all of these schools.
- (g) The increase of the annual State appropriations to county high schools from \$3,000 to \$4,000, provided that no such school shall hereafter receive any State aid whatever unless the State money is duplicated dollar for dollar from county funds.
- (h) The increase of State support for the colored normal schools and direct State support for county training schools for colored teachers, as outlined in Chapters XI and XIII.
- (i) The reorganization of the school finances by (1) strict enforcement of section 9 of the revenue code; (2) legal enactment to place the assessment of all property under direct control of the State government; (3) provision for equable income and inheritance taxes; and (4) provision for a searching study of the entire subject of taxation in the State.